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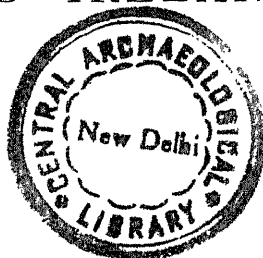
A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE.

PUBLISHED UNDER THE DIRECTION OF THE
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CONTENTS.

ORIGINAL ARTICLES.

	No.
Admiralty Islands. Note on Native Dance in the Admiralty Islands. H. N. M. HARDY ...	69
Africa. See NILE VALLEY; SIERRA LEONE.	
Ægean: Archæology. The Invention of Copper-making. G. ELLIOT SMITH ...	18
Anthropology. A Reply to Mr. Pycraft's Plea for a Substitute for the Frankfort Base-line. (Illustrated.) F. G. PARSONS ...	43
Anthropology. Photographs of Welsh Anthropological Types. H. J. FLEURE ...	111
Anthropology. See CANADA.	
Anthropology. The Cranial Cast of the Piltdown Skull. G. ELLIOT SMITH ...	82
Anthropology. The Endocranial Cast of the Piltdown Skull. W. WRIGHT, M.B. ...	93
Archæology. On the Discovery of some Human Bones, etc. of Neolithic and later date in the Ipswich District. (With Plate I and Illustration.) J. REID MOIR ...	60
Archæology. On a Strange Stone Object from a Bronze-Age Internment in Essex. (Illustrated) ...	27
Archæology. The Flaking of Sub-Crag Flints. J. REID MOIR ...	92
Archæology. The Origin of the Dolmen. (Illustrated.) H. PEAKE ...	68
Archæology. Western Australian Stone Implements. L. GLAUERT, F.G.S., F.R.A.I. ...	44
Archæology. See ÆGEAN; BRITISH HONDURAS; GOLD COAST COLONY; MALTA; MEXICO; PALESTINE.	
Australia. An Australian Bible Story. C. G. SELIGMAN, M.D. ...	29
Australia. Australian Rafts. A. R. BROWN ...	4
British Honduras: Archæology. On a Chipped Flint Implement found in British Honduras. (Illustrated.) H. ST. GEORGE GRAY ...	91
British New Guinea. Lime Spatulae from Rossel Island. (Illustrated.) C. G. SELIGMAN, M.D. ...	2
Burma. Death Customs in Burma. R. GRANT BROWN ...	15
Burma. On a Method of Manufacturing Charms in Burma. R. GRANT BROWN ...	67
Canada. Anthropology in Canada. (Illustrated.) A. C. BRETON ...	34
Detection. A Zuiii Detective. ELSIE CLEWS PARSONS... ..	99
East Africa. Note on some Nandi Remedies. NORMAN P. FENWICK ...	53
Egypt. A Few Notes on the Neolithic Egyptians and the Ethiopians. V. GIUFFRIDA-RUGGERI ...	55
Egypt: Folklore. Notes on some Cairene Personal Amulets. (With Plate F.) W. L. HILDBURGH ...	52
Ethnography. Maori Necklace and Pendants of Human and Imitation Teeth. (Illustrated.) H. D. SKINNER ...	80
Ethnography. Notes on the Galla. (With Plate M and Illustration.) J. H. PHILLIPSON	107
Ethnography. See KORDOFAN; NEW ZEALAND.	
Folklore. See EGYPT.	
Gold Coast Colony: Archæology. Discovery of Presumed Palæolith. (Illustrated.) F. W. H. MIGEOD ...	36
Indonesia. The Orientation of the Dead. H. O. FORBES	3, 35
Indonesia. Dr. H. O. Forbes and "The Orientation of the Dead in Indonesia." W. J. PERRY	25
Kordofan: Ethnography. A simple form of Reaping Knife from Northern Kordofan. C. G. SELIGMAN, M.D. ...	81
Kordofan: Ethnography. Stone-headed Club from Southern Kordofan. (Illustrated.) C. G. SELIGMAN, M.D. ...	100
Linguistics. See POLYNESIA.	
Malabar. Kingship in Ancient Malabar, with special reference to Cochin. K. R. V. RAJAH	90
Malta: Archæology. Excavations in Malta in 1914. (With Plates A and B and Illustrations.) THOMAS ASHBY, THEMISTOCLES ZAMMIT, and GIUSEPPE DESPOTT ...	1, 14
Mathematics. A Duodecimal System in South Africa (?). N. W. THOMAS ...	70
Mexico: Archæology. Note on a Fine Tecalli Vase of Ancient Mexican Manufacture. (With Plate C and Illustrations.) T. A. JOYCE, M.A. ...	24
New Caledonia: Ethnology. Notes on a Visit to New Caledonia. (With Plate H.) J. MACMILLAN BROWN ...	66

	No.
New Guinea. A further Note on the Use of the Wooden Trumpet in Papua. (<i>Illustrated</i>). W. N. BEAVER, F.R.A.I.	16
New Guinea. Kava Drinking in New Guinea. (<i>Plate K</i>). A. C. HADDON	87
New Zealand: Ethnography. Origin and Relationship of Hani, Tewha-Tewha and Pou- Whenua. H. J. BALFOUR, M.A.	108
New Zealand: Ethnography. Origin and Relationship of Hani, Tewha-Tewha and Pou- Whenua. (<i>With Plate L and Illustrations</i>). H. D. SKINNER	97, 109
Nigeria, Southern Provinces. Note on Ibo House. (<i>With Plate I—J</i>). P. AMAURY TALBOT	79
Nile Valley. Dinka Arrows. (<i>Plate K</i>). C. G. SELIGMAN, M.D.	88
Obituary. Sir Laurence Gomme. A. C. HADDON	54
Obituary. Sir Clements Markham. (<i>With Plate D</i>). A. P. MAUDSLAY	33
Obituary. Sir Richard Martin. E. BRABROOK	89
Obituary. Sir William Turner, K.C.B., F.R.S. (<i>With Plate E</i>). A. KEITH	42
Palestine: Archæology. A Note on Megalithic Monuments. A. L. LEWIS	17
Polynesia: Linguistics. A Samoan Sound Change. A. M. HOCART	28
Polynesia: Linguistics. Remarks on Samoan Sound Changes. REV. G. BROWN, D.D.	110
San Diego. Physical Anthropology at San Diego. A. C. BRETON	26
Sierra Leone: Africa, West. Mende Songs. F. W. H. MIGEOD	112
Sierra Leone: The Poro Society. The Building of the Poro House and Making of the Image. F. W. H. MIGEOD	61
Sociology. Some Australian Classes, Named and Nameless. RICHARD C. E. LONG	98
Superstition. The Growth of a Legend in Egypt. G. A. WAINWRIGHT	5

REVIEWS.

Africa. Meinhof. <i>An Introduction to the Study of African Languages</i> . B. Z. S.	22
Africa, South: Linguistics. Stirke: Thomas. <i>A Sikololo Phruse Book</i> . S. H. R.	78
America, North. Moorehead. <i>The American Indian in the United States</i> . E. N. F.	45
America, South. Whiffen. <i>The North-West Amazons: Notes of some Months spent among Cannibal Tribes</i> . CLEMENTS R. MARKHAM	46
Anthropology. Ellis. <i>Man and Woman: A Study of Human Secondary Sexual Characters</i> . A. KEITH	8
Anthropology. Evans. <i>Black and White in the Southern States</i> . A. KEITH	94
Anthropology. Keith. <i>The Antiquity of Man</i> . WILLIAM WRIGHT	73
Anthropology. Temple. <i>Anthropology as a Practical Science</i> . E. N. F.	10
Anthropology. See INDIA.	
Arabia: Numismatics. Hill. <i>Ancient Coinage of Southern Arabia</i> . M. LONGWORTH DAMES	102
Archæology. Bushe-Fox: Hill: Gowland. <i>Excavations at Hengistbury Head, Hampshire</i> . F. HAVERFIELD	31
Archæology. Droop. <i>Archæological Excavations</i> . H. J. E. P.	95
Archæology. Koldewey: Johns. <i>The Excavations at Babylon</i> . L. W. KING	39
Archæology. See EGYPT; FRANCE; INDIA.	
Australia. Masson. <i>An Untamed Territory: The Northern Territory of Australia</i> . J. EDGE-PARTINGTON	96
Balochistan. Bray. <i>The Life-History of a Brāhūi</i> . M. LONGWORTH DAMES	63
Bibliography. Hill. <i>Royal Colonial Institute Bibliographies. No. 1. A Select Bibliography of Publications on Foreign Colonisation</i> . H. S. H.	74
Bibliography. Piper. <i>Index to Periodicals</i> . E. N. F.	19
Calisthenics. Ridgeway. <i>The Dramas and Dramatic Dances of Non-European Races; with an Appendix on the Origin of Greek Comedy</i> . E. SIDNEY HARTLAND	37
China and India. Laufer. <i>History of Defensive Armor</i> . L. A. WADDELL	21
Craniology. Thomson. <i>A Study of the Craniology of the Mori-ori</i> . H. D. SKINNER	103
Craniology. Turner. <i>A Contribution to the Craniology of the People of Scotland</i> . F. G. PARSONS	83
East Anglia: Prehistoric Society. Clarke. <i>Report on the Excavations at Grime's Graves, Weeting, Norfolk</i> . W. WRIGHT	84
Egypt. Peet. <i>The Stela of Sebek-khu: The Earliest Record of an Egyptian Campaign in Asia</i> . ALAN H. GARDINER	7

	No.
Egypt: Archæology. Blackman. <i>The Rock Tombs of Meir, Part I.: The Tomb Chapel of Ukh-Hotp's Son Senbi. Part II.: The Tomb Chapel of Senbi's Son Ukh-Hotp.</i> M. A. MURRAY	114
Ethnology. Thalbitzer. <i>The Ammassalik Eskimo-Meddelelser om Grønland. Vol. XXXIX.: Contributions to the Ethnology of the East Greenland Natives. Part I.</i> H. J. BRAUNHOLTZ	56
Folksong. Kidson and Neal. <i>English Folksong and Dance.</i> E. N. F.	20
Folklore. See HONOLULU.	
France: Archæology. Baudouin. <i>Le Sépulture Néolithique de Belleville à Vendrest. L'Ossuaire de la Ciste des Cousins.</i> A. KEITH	101
France: Archæology. Baudouin. <i>L'Orientation des Mégalithes funéraires et le Culte solaire à l'Époque néolithique.</i> A. L. LEWIS	59
Honolulu: Folklore. Westervelt. <i>Legends of Old Honolulu.</i> E. SIDNEY HARTLAND	47
India: Anthropology. Risley. <i>The Peoples of India.</i> T. C. H.	38
India: Archæology. <i>Archæological Survey of India, 1912-1913.</i> M. LONGWORTH DAMES	105
India: Religion. Macnicol. <i>Indian Theism from the Vedas to the Muhammadan Period.</i> W. CROOKE	62
India. Rose. <i>A Glossary of the Tribes and Castes of the Punjab and North-West Frontier Province.</i> M. LONGWORTH DAMES	6
Linguistics. See AFRICA, SOUTH.	
Literature. King. <i>A History of Babylonia and Assyria. Vol. II.: A History of Babylon from the Foundation of the Monarchy to the Persian Conquest.</i> LEEPER ...	58
Literature. Ross. <i>Three Turki Manuscripts from Kāshgar.</i> M. LONGWORTH DAMES ..	77
Malay. Gimlette. <i>Malay Poisons and Charm Cures.</i> W. W. SKEAT	30
Mexico. Salazar. <i>Crónica de la Nueva España.</i> A. C. BRETON	48
Mithraism. Phythian-Adams. <i>Religions: Ancient and Modern; Mithraism.</i> A. L. L. ...	40
Mythology: India. Rama Varma Raja. <i>Comparative Studies.</i> M. LONGWORTH DAMES...	76
Palæolithic Art. Sollas. <i>Ancient Hunters and their Modern Representatives.</i> S. HAZZLEDINE WARREN	50
Persia: History. Sykes. <i>A History of Persia.</i> W. CROOKE	72
Physical Anthropology. Duckworth. <i>Morphology and Anthropology: A Handbook for Students.</i> A. KEITH	71
Prehistoric Art. Parkyn. <i>An Introduction to the Study of Prehistoric Art.</i> A. C. HADDON	113
Race Sentiment. Bryce. <i>Race Sentiment as a Factor in History.</i> E. N. F.	104
Religion. See INDIA; SOCIOLOGY.	
Siberia. Czaplíčka. <i>Aboriginal Siberia: A Study in Social Anthropology.</i> E. N. F. ...	57
Social Organisation. Rivers. <i>Kinship and Social Organisation.</i> E. N. F.	75
Sociology. Blackmar and Gillin. <i>Outlines of Sociology.</i> E. N. F.	64
Sociology. Ford. <i>The Natural History of the State: An Introduction to Political Science.</i> E. N. F.	64
Sociology. Keller. <i>Societal Evolution: A Study of the Evolutionary Basis of the Science of Society.</i> CARVETH READ	9
Sociology: Religion. Durkheim. <i>The Elementary Forms of the Religious Life.</i> E. SIDNEY HARTLAND	49

PROCEEDINGS OF SOCIETIES.

Abstracts of Papers presented to Section H. at the British Association Meeting, 1916	85
--	----

ANTHROPOLOGICAL NOTES.

Honour conferred on Dr. W. H. R. Rivers	11
Honour conferred on Capt. T. C. Hodson	12

ILLUSTRATIONS IN THE TEXT.

N.B.—Photographs, unless otherwise stated.

Fig. 1. Plan : "Debdielba" Neolithic Station. (<i>Drawing.</i>)	...	...	...	...	With No. 1
Lime Spatulæ from Rossel Island	...	...	...	...	" 2
Fig. 1. Fragments of Prehistoric Pottery found in the Cave of Ghar Dalam, Malta. (<i>Drawings.</i>)	...	...	...	...	" 14
Fig. 2. Inside of Cave, showing Hippopotamus remains	...	...	...	...	" 14
Wooden Trumpet, Papua	...	...	...	...	" 16
Fig. 1. Stone object from Bronze Age internment in Essex	...	...	...	...	" 27
Figs. 2 & 3. Ends of Stone Object from Bronze Age internment in Essex. (<i>Drawing.</i>)	...	...	...	...	" 27
Pottery Vase from Roebuck Site, near Ottawa	...	...	...	...	" 34
Figs. 1, 2 & 3. Presumed Palæolith from Gold Coast Colony	...	...	...	...	" 36
Fig. 1. Skull of European. (<i>Drawing.</i>)	...	...	...	...	" 43
Fig. 2. Skull of Gorilla. (<i>Drawing.</i>)	...	...	...	...	" 43
Fig. 4. Bramford Road Anglo-Saxon Skeleton <i>in situ</i>	...	...	...	...	" 60
Stone, Copper and Bronze Celts. (<i>Drawings.</i>)	...	...	...	...	" 68
Maori Necklace of Human Teeth—Pendants of Human Teeth—Pendants of Artificial Human Teeth	...	...	...	...	" 80
Fig. 1. Reaping Knives from Northern Kordofan \times about $\frac{2}{3}$	...	...	...	...	" 81
Fig. 2. Blade of Reaping Knife $\times \frac{1}{2}$. (<i>Drawing.</i>)	...	...	...	...	" 81
Fig. 3. Knife with Stone Blade from Swiss Lake Dwelling $\times \frac{3}{4}$. (<i>Drawing.</i>)	...	...	...	...	" 81
Chipped Flint from Honduras	...	...	...	...	" 91
Fig. 6. Detail carving of Hani, Tewha-Tewha, Pou-Whenua. (<i>Drawing.</i>)	...	...	...	...	" 97
Fig. 7. Pou-Whenua. Length, 48 in. Locality, Taranaki. (<i>Drawing.</i>)	...	...	...	...	" 97
Fig. 8. Light Club. Locality, Rarotonga. Length, 90 ins. (<i>Drawing.</i>)	...	...	...	...	" 97
Fig. 9. Upper Ends of Pou-Whenua, two types. (<i>Drawing.</i>)	...	...	...	...	" 97
Fig. 10. Paddle Club. Length, 50 ins. Locality, Solomon Island. (<i>Drawing.</i>)	...	...	...	...	" 97
Fig. 11. Detail Carving of three Hani. After Balfour's "Evolution of Decorative Art," p. 57	...	...	...	...	" 97
Stone-headed Club from Kordofan $\times \frac{1}{2}$. (<i>Drawing.</i>)	...	...	...	...	" 100
Fig. 4. Min Nagesa. The House of the Dead	...	...	...	...	" 107
Fig. 5. Typical Galla House	...	...	...	...	" 107

DESCRIPTION OF THE PLATES.

A-B. Excavations at Id-debdielba, Malta	...	...	...	...	With Nos. 1 & 14
C. Ancient Mexican Tecalli Vase	...	...	...	...	" 24
D. Sir Clements Markham	...	...	...	...	" 33
E. Sir William Turner, K.C.B., F.R.S.	...	...	...	...	" 42
F. Some Cairene Personal Amulets	...	...	...	...	" 52
G. Neolithic Discoveries in the Ipswich District	...	...	...	...	" 60
H. Natives of New Caledonia	...	...	...	...	" 66
I-J. Decoration of Ibo Houses	...	...	...	...	" 79
K. i. Kava Root and Bowls from Kawai, British New Guinea	...	...	...	...	" 87
ii. Arrows used by the Agar Dinka	...	...	...	...	" 88
L. Maori Weapons (Hani, Tewha-Tewha, and Pou-Whenua	...	...	...	...	" 97
M. Typical Photographs of the Galla	...	...	...	...	" 107

LIST OF AUTHORS.

N.B.—The Numbers to which an asterisk is added are those of Reviews of Books.

- ASHBY, T., 1, 14.
 BALFOUR, H., 108.
 BEAVER, W. N., 16.
 BRABROOK, E., 89.
 BRAUNHOLTZ, H. J., 56*.
 BRETON, A. C., 26, 34, 48*.
 BROWN, A. R., 4.
 BROWN, REV. G., 109.
 BROWN, J. MACMILLAN, 66.
 BROWN, R. GRANT, 15, 67.

 CHRISTY, MILLER, 27.
 CROOKE, W., 62*, 72*.

 DAMES, M. LONGWORTH, 6*, 63*, 76*,
 77*, 102*, 105*.
 DESPOTT, GIUSEPPE, 1, 14.

 FALLAIZE, E. N., 10*, 19*, 20*, 45*,
 57*, 64*, 75*, 104*.
 FENWICK, NORMAN P., 53.
 FLEURE, H. J., 110.
 FORBES, H. O., 3, 35.

 GARDINER, ALAN H., 7*.
 GLAUERT, L., 44.
 GRAY, H. ST. GEORGE, 91.

 H. S. H., 74*.
 HADDON, A. C., 54, 87, 112*.
 HARDY, H. N. M., 69.
 HARTLAND, E. S., 37*, 47*, 49*.
 HAVERFIELD, F., 31*.
 HILDBURGH, W. L., 52.
 HOCART, A. M., 28.
 HODSON, T. C., 38*.

 JOYCE, T. A., 24.

 KEITH, A., 8*, 42, 71*, 94*, 101*.
 KING, L. W., 39*.

 LEEPER, A. W. A., 58*.
 LEWIS, A. L., 17, 40*, 59*.
 LONG, RICHARD, C. E., 98.

 MARKHAM, CLEMENTS R., 46*.
 MAUDSLAY, A. P., 33.
 MIGEOD, F. W. H., 36, 61, 111.
 MOIR, J. REID, 60, 92.
 MURRAY, M. A., 114*.

 PARSONS, ELSIE CLEWS, 99.
 PARSONS, F. G., 43, 83*.
 PARTINGTON, J. EDGE, 96*.
 PEAKE, HAROLD, 68, 95*.
 PERRY, W. J., 25.
 PHILLIPSON, J. H., 107.

 RAJAH, K. R. V., 90.
 RAY, S. H., 78*.
 READ, CARVETH, 9*.
 RUGGERI, V. GIUFFRIDA, 55.

 S., B. Z., 22.
 SELIGMAN, C. G., 2, 29, 81, 88, 100, 113*.
 SKEAT, W. W., 30*.
 SKINNER, H. D., 80, 97, 103*.
 SMITH, G. ELLIOT, 18, 82.

 TALBOT, P. AMAURY, 79.
 THOMAS, N. W., 70.

 WADDELL, L. A., 21.
 WAINWRIGHT, G. A., 5.
 WARREN, S. HAZZLEDINE, 50*.
 WRIGHT, W., 73*, 84*, 93.

 ZAMMIT, T., 1, 14.
-



FIG. I



FIG. II.

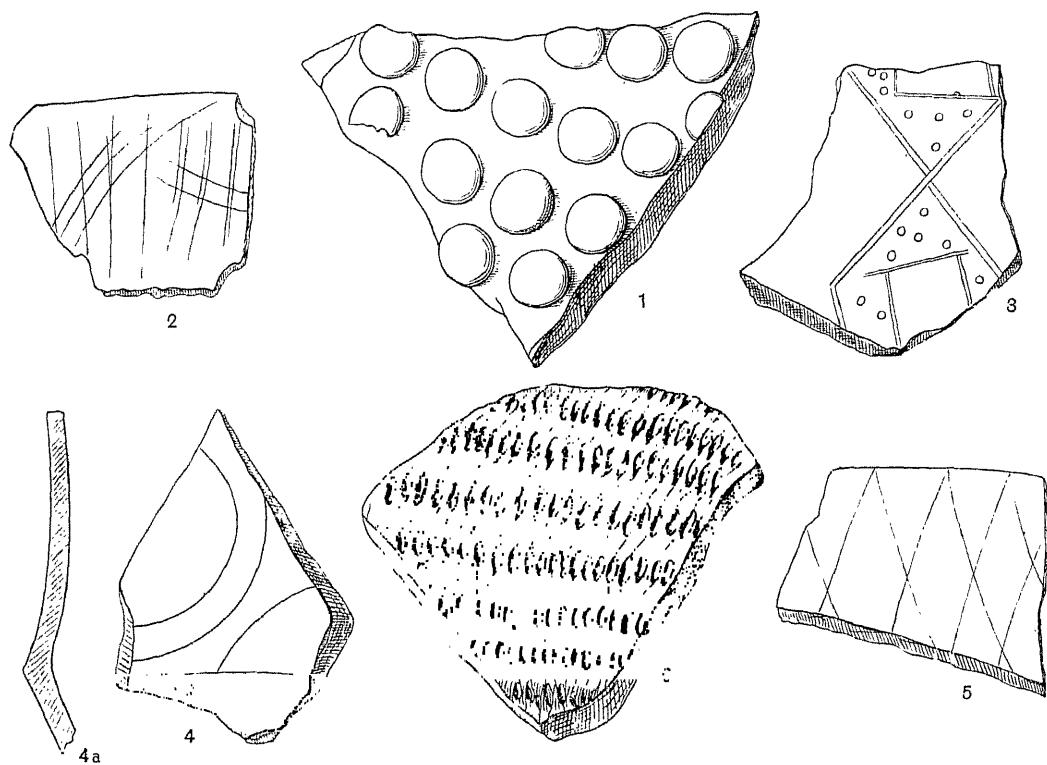


FIG. III.

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A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE.

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ORIGINAL ARTICLES.

With Plate A.

Archæology.

Ashby—Zammit—Despott.

Excavations in Malta in 1914. By T. Ashby, T. Zammit, and G. Despott.

I.—EXCAVATION.

During a week's stay in Malta in October 1914, I was able to conduct the excavation of a portion of a megalithic building, on a site called Id-debdiēba ("the Place of the Echo" in Maltese), pointed out to me by Professor T. Zammit, Curator of the Valletta Museum, who frequently visited the site, and has contributed the report on the objects found which forms the second part of this paper. The funds for the work were provided by the Government of Malta, and the site itself is Government property.

The building is situated on high ground in the middle of the S.E. portion of the island, with a fine view, except to the south, on the E. edge of the Hal-Farrug road, which runs from the Poor House to Mkabba, and about three-quarters of a mile from the centre of that village. It is situated at a distance of a few hundred yards N.W. of the quarries of Bur-meghez,* and the same to the E. of It-Torri Tal Wilgia.† Only a portion of it is included within the area belonging to the Government, and how much of it lies (or lay) under the neighbouring fields, and how much has been destroyed by the construction of the road, it is not easy to determine, for the portion of it which has been laid bare does not conform sufficiently closely to the plans of these megalithic buildings, as far as we know them at present,

* See N. Tagliaferro, in MAN, XI (1911), No. 92, for a description of a prehistoric burial cave found here.

† See *Papers of the British School at Rome*, VI (1913), p. 123, for a description of this tower, which belongs, however, to the Phœnician period, to judge from the pottery discovered on the site.

to enable us to determine with any degree of probability what relation it bore to the whole. See the Plan, Fig. 1 (text).

On the N. two lines of stones running side by side (1) appear to belong to a double wall, the interval between them having been filled with stones and earth. The continuation of this wall seems to curve away to the S.E. and to disappear under the field wall. The other lines of wall (2) marked on the plan are somewhat doubtful, and are composed of smaller stones, though at 2a there are some large ones; and here were found two small columns of the type so common in Maltese megalithic buildings (Nos. 1 and 2 of the list below). But the first really determinate portion is the wall (3), composed of not very large stones.

To the E. of this were found two more short columns (Nos. 3 and 4 of the list).

No connecting wall to the E. has been found, so that we do not know what was the nature of the space it enclosed. Immediately to the E. of it the rock is overlaid by a number of small stones (perhaps thrown in from the surrounding fields), but it soon rises in level.

To the W. of it are some scanty traces of walling (4), as though there had been one or two small rectangular chambers, belonging no doubt to a later date.

To the S. of these are two standing slabs (5, 5'), 2 feet 1 inch apart, which are no doubt *in situ*; the slabs 5'', the westernmost of which projects into the road, may be connected with them.

The interval between them is filled with walling of small stones, which is no doubt of later date. Close to 5' was a broken block of stone, with part of a funnel-shaped hole in it 7 inches deep and $7\frac{1}{2}$ inches in diameter. It was lying loose, but close to it is what may be a piece of later walling (6) with five stones lying one upon the other.

To the E. are some extremely indeterminate remains, including two large fallen blocks (7, 7'), which are no doubt remains of the megalithic building. 7 has three shallow steps cut in it, the purpose of which is uncertain, while 7' has a large hole in it.

Here begins a straight line of wall (8, 8') which is no doubt of the later period. The stones at 9, 9' may have belonged to the original building.

We now reach what is really the only determinate part of the original building—the central portion where we find the room or passage 10, which is largely built of vertical slabs (Pl. A, Fig. II). There was no trace of a torba or other floor, and the existence of a funnel-shaped hole in the rock at *a** would indicate that there was none. The room, like the rest, was found to be full of small loose stones at the bottom, but they did not form a pavement.

To the E. of this hole is a niche or doorway *b*, 2 feet 6 inches in width. The large blocks on each side of it have each of them one of the usual tie holes. They are 3 feet 6 inches in height, but do not rest directly on the rock, as indeed none of the blocks in this room do, but upon about 10 inches of earth. At the back of them (*i.e.*, on the E. side) there seem to be footing blocks. In the angle *c* next beyond this doorway, a small column was found lying, and another was found further to the S. (Nos. 5, 6 of the list). Further south, on the same side, is another opening *d*, filled with walling of smaller stones, and beyond it is another large slab *e*. Beyond it we may place, somewhat doubtfully, the entrance to the room.

The W. wall was almost entirely composed of smaller stones, with the exception of the large slab *f*' and the fallen slab *f*'.

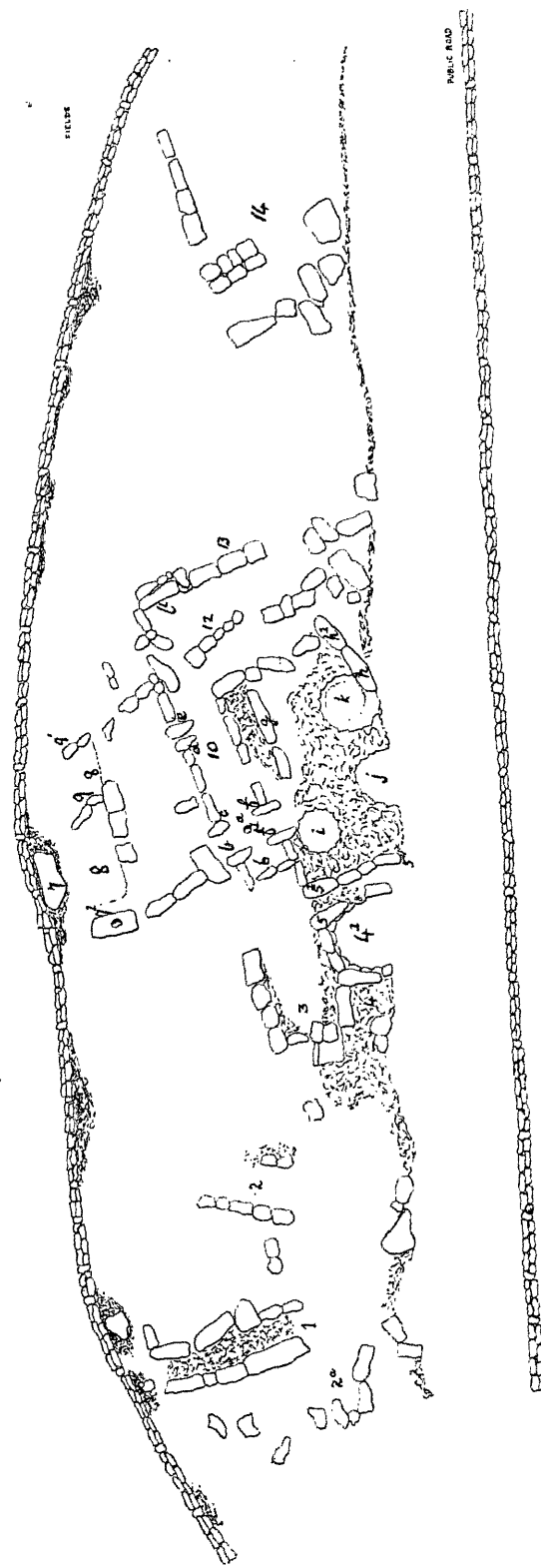
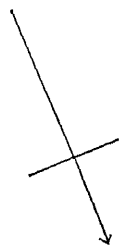
It was a solid wall of considerable thickness, which increased as it ran N.W.; on the S.E. and S.W. sides it is supported by large slabs, of which *g*, measuring 6 feet 2 inches long by 3 feet 8 inches high, is the largest in the whole building.

* This hole measures 9 inches in depth and 1 foot in diameter at the top.

"Debieba" Neolithic Station

North of Mkabba—Malta.

1914



PLAN, FIG. 1

The space 11,* which these slabs and others (now only represented by the slabs *h*, *h'*) once enclosed, has later been occupied by three curious circular constructions, *i*, *j*, *k* (Pl. A. Fig. I). They have domed roofs of small stones which were closed at the top (at any rate in the case of *k*) by a circular slab (No. iv of the list below); *k* is 4 feet in height internally, and 5 feet 7 inches in diameter. It is cut down into the rock for a depth of only about 6 inches.

Fine earth was found in all of them, but no trace of burning.

The object which they served and the date at which they were constructed are quite uncertain.

On the S. side of 10 and 11 there is a curved wall of small stones (12) which may be the original wall.

The straight wall 13, on the other hand, which incorporates two of the megalithic blocks *l*, *l'*, is certainly of later date; but the walls 14 at some distance off seem to belong to the original building.

THOMAS ASHBY.

II.—OBJECTS FOUND IN THE COURSE OF THE EXCAVATION AT ID-DEBDIEBA.

(1) *Objects of Stone.*

(i) Six pillars, some of hard coralline limestone and some of soft sandstone, cylindrical in shape, but some tapering at one end. They are of the type usual in Maltese megalithic ruins. Their measurements are as follows:—

Height.	Diameter of base.	Top diameter.
1.—1 ft. 8 in.—55·5 cm.	1 ft.—30·5 cm.	8 in.—20 cm.
2.—1 ft. 5 in.—43·0 cm.	9 in.—22·5 cm.	7 in.—17·5 cm.
3.—2 ft.—61 cm.	1 ft.—30·5 cm.	9 in.—22·5 cm.
4.—1 ft. 10 in.—55·5 cm.	1 ft. 3 in.—38·0 cm.	1 ft.—30·5 cm.
5.—2 ft. 4 in.—71·0 cm.	1 ft.—30·5 cm.	1 ft.—30·5 cm.
6.—1 ft. 9 in.—53·0 cm.	9 in.—22·5 cm.	9 in.—22·5 cm.

No. 1 is now preserved in the Valletta Museum. The others were placed together and buried again in the ruins.

(ii) A rectangular block of stone $4\frac{1}{2}$ inches (114 mm.) long and $3\frac{1}{2}$ inches (87 mm.) high with a groove running along its length $1\frac{1}{2}$ inches (37 mm.) deep and $2\frac{1}{2}$ inches (62 mm.) wide.

(iii) A hard stone block 2 feet (61 cm.) \times 1 foot 9 inches (53 cm.) \times 10 inches (25 cm.) with a cavity 9 inches (22·5 cm.) in diameter and 8 inches (20 cm.) deep. The cavity is quite smooth and must have been used as a mortar.

(iv) Two stone slabs, very probably the covers of two of the pits (*i*, *j*, *k*) constructed in the ruin. One of them was roughly circular, 3 feet 11 inches (119 cm.) wide and 4 inches (10 cm.) thick. It was perforated in the middle with a round hole 1 foot 4 inches (40 cm.) in diameter.

The other slab was square and of the same thickness. The fragment of the slab measured 2 feet 1 inch (63·5 cm.) by 1 foot 4 inches (40 cm.). It had a hole in the middle 1 foot 2 inches (35 cm.) in diameter with a groove round the edge.

(v) Fragment of a hard stone rubber. This stone was perfectly smooth on one side and roughly oval in shape. About 1 foot (30·5 cm.) long and 6 inches (15 cm.) in thickness.

(vi) A stone slab 3 feet 4 inches (101·5 cm.) in length and about 3 feet (91 cm.) wide was found loose in the ruins. On it a pillar was cut, showing that the slab probably formed part of the walls of a niche.

(vii) Flint instruments. These were scarce, for though flakes and small fragments were numerous, only two large objects of flint were obtained. One of these is of a dark grey flint of very fine texture $2\frac{1}{4}$ inches (57 mm.) long and about 1 inch (25 mm.) wide, tapering at one end and broken flat on the other. The edge on one side of

* Here was found the block of stone described in Professor Zammit's list (No. III).

the stone is slightly convex and tooled to render it more keen; on the other side the edge is blunt and shows a conchoid fracture.

The second instrument is of a creamy white chert, pyramidal in shape, about 2 inches (50 mm.) long, with a base of $1\frac{1}{2}$ inches (35 mm.). The sharp edge is produced by fracture without any retouching.

(2) *Objects of Earthenware*—

Fragments of dark red bricks with a very rough texture were found. Some of the pieces were evidently fragments of floors or walls of ovens.

Pottery.—Potsherds were very abundant, but hopelessly mixed up with stones and soil, and in very small fragments. Most of this material came from vases of neolithic times (contemporary, that is, with the original building) made of a grey-black clay; but sherds of later epochs, Greek and Roman, have also been obtained, showing that the site was made use of for centuries.

Large Vases.—Fragments of thick, hand-made, unornamented black clay vessels were more numerous than the finer variety. These thick vases always become thicker at the rim, which has usually double the thickness of the vase. Actual measurements gave the following result: For vases 18, 15, 12, 8 mm. thick, the free edge was found to be 38, 32, 17, 15 mm. respectively.

Most of these large vessels had the characteristic triangular handle so common in the pottery of the Maltese monuments; in the smaller vases the handle is often superseded by a knob, which must have proved more ornamental than practical.

Medium Sized and Small Vases.—These resemble very remarkably the Halsaffieni ware. Their texture is fine, the modelling is excellent, and the finishing is accurate and elaborate.

It is interesting to compare these sherds with those obtained from other Maltese monuments, especially with those obtained from Halsaffieni, as described by Professor Tagliaferro, in the *Liverpool Annals of Archaeology and Anthropology*, Vol. III (1910), p. 1 *sqq.*; cf. also Peet in *Papers cit.*, p. 29 *sqq.*

Section B, Class 3. Pit-mark Ornaments.—Good pieces were obtained of a fine ware on which the pittings are not in the shape of dots, but small, comma-like incisions (Pl. A, III, Fig. 6).

Section C. Buff Ware, Relief Decorations of Leaves, Fish-scale and Scallop Pattern.—Only a few sherds were found, too small to reconstruct the pattern, but large enough to recognise the type.

Section D. Black or Red Ware decorated with Prominent Studs.—A triangular fragment, about 25 mm. in length, of a light buff colour, was found studded with circular discs, such as those shown in Plate VI, Fig. 3. The studs were larger and more closely arranged. The fragment resembles a pattern found at Mnaidra (Fig. 1).

Section E. Yellow and Grey Ware, highly polished, but without Ornament.—Numerous samples of this kind of ware were obtained, varying in colour from a pale buff to a dark grey or even dull black. The shape of these vessels could not be clearly obtained owing to the small size of the sherds.

Section F. Red Ware with Incised Rope Ornament.—A good piece of this type was found resembling very much vessels from Halsaffieni.

Section G. Polished Ware decorated with Incised Lines.—

(a) Simple geometrical designs—fragments abundant.

(b) Lines starting parallel and then diverging—several sherds of this description obtained.

(c) Composite designs of lozenges, triangles, zigzags, and lattices—abundant sherds of this class recovered (Figs. 2, 5).

(d) Curved lines, scrolls, and meanders—sherds so ornamented were abundant (Figs. 4 and 4a).

Of Class 19 of this section, a good piece was obtained which shows a slight variation from the Halsaflieni type. On this sherd two deep lines cross each other, forming two triangles joined at the apex. In each triangle two small squares are inscribed, and the space all round is filled with pit-marks. The sherd is of a reddish paste, and the incision is filled with a thick white paste (Fig. 3).

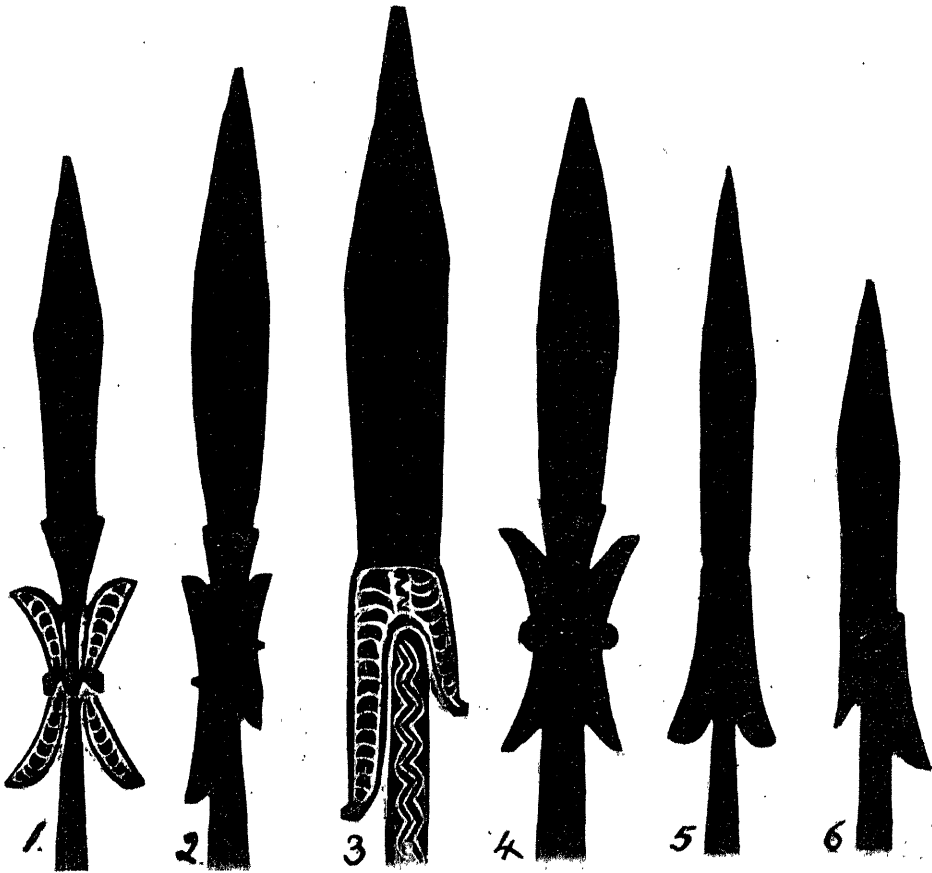
THEMISTOCLES ZAMMIT.

British New Guinea.

Seligman.

Lime Spatulæ from Rossel Island, British New Guinea. By Professor Seligman, M.D. **2**

The accompanying figure shows the handles of a number of spatulæ collected at Rossel Island by Captain F. R. Barton, C.M.G., and by him presented to the



LIME SPATULÆ FROM ROSSEL ISLAND.

British Museum. All the spatulæ (8) seen by him on the island were of this type with blades of moderate length, a specimen in my possession (very like No. 4) measuring 25 cm. over all. The handles are split so as to form clappers, and the carving is reduced to a minimum, the implements being thinner and slighter than is usual elsewhere. It will be noted that the form of these spatulæ does not conform to any of the ordinary Massim types as defined by Haddon in *The Decorative Art of British New Guinea* (page 204), nor have I met it in the district, and I suspect that this type is peculiar to Rossel Island.

The double semi-lunar ornamentation on Nos. 1 and 3 was called *gava*, the short transverse lines in these *dö*, which term is also applied to short transverse marks tattooed on the cheeks, and Captain Barton suggests that *dö* = cheek. The central wavy lines on No. 2 were called *nengö*, which seemed to Captain Barton to be the word for frigate bird. *Gava* may, perhaps, be the same as *gawa*, given by Sir William MacGregor* as signifying a "coconut leaf"; *nengö* may be the MacGregor's *ngu*, "frigate bird," or perhaps *nenga*, the "wing of a fly." C. G. SELIGMAN.

Indonesia.

Forbes.

"The Orientation of the Dead in Indonesia." By H. O. Forbes.

3

Volume XLIV of the *Journal* of the Institute, p. 281, contains a paper on "The Orientation of the Dead in Indonesia," by Mr. Perry. The author attempts to prove that the hypothesis of Herbert Spencer is correct, *i.e.*, that "the direction of orientation of the dead is the same as that of the land of the dead, that is to say, that the body of a dead person is oriented in the direction in which the ghost has to travel. The survey being confined to Indonesia, that is the East Indian archipelago and the Burma-Assam region." In this communication I do not find all the data used by the author entirely reliable, nor his conclusions very convincing. In the first place, I think that "Indonesia," inasmuch as it suggests a region predominantly inhabited by "Indonesians," is an ambiguous and not the most accurate geographical designation for the area to which Mr. Perry's survey is confined, which includes both Indo- and Austro-Malaya, peopled largely also by Mongols and Melanians (Papuan and Melanesians). In the islands of that region, with which I have some small acquaintance, I failed to discover the beliefs that others seem to have found and recorded as existing there. This may be due, perhaps, to lack of close enough research on my part. I do not now presume to challenge the results reached by the author—though far from personally convincing—which seem based on information derived from a larger area than I have intimate knowledge of, and collected from the observations of travellers and investigators of good repute. In the interests of scientific accuracy, however, I should wish to point out that in regard to the Tenimber (or Timor-laut) islands, several of the statements which Mr. Perry relies on to support his hypothesis require further corroboration. The author, following Riedel, states "that the bodies of medicine-men and unimportant persons are *interred* [my italics] in a canoe-coffin with the head at the east end." Riedel also states that the bodies of chiefs and notables are placed in canoe-coffins on a platform, the canoe lying in the same direction. Van Hoeverl simply states that the dead are placed in canoe-coffins on a platform with the head at the west end and the feet at the east [just the reverse of Riedel's observation]! . . . The land of the dead is on Nusnitu, an island to the west of the group."

Personal circumstances tend to make me hesitate in accepting *all* Riedel's observations on Timor-laut. I have reasons for an impression that he never personally visited Tenimber or Timor-laut; if he did his visit was of short duration. I know that during my stay on the islands information was being gathered for him—he had certainly not visited the group up to that date—by a very subordinate and quite uneducated Ambinese. At that period, at all events, the majority of the dead were not enclosed in coffins of any form, though not infrequently others were wrapped round by a rough, rather open hurdle of palm-leaf stems, and their bodies deposited on the burial platforms were oriented in every direction of the compass; for this direction depended very greatly on the bearing of the long axis of the isolated coral-blocks studding the shore, chiefly utilised as the burial platforms—the body being naturally laid along the longer axis of the narrow coral pyramids. I have

* Aboriginal Vocabulary of Yela (Rossel Island), *Annual Report on British New Guinea*, 1893-94.

even seen a recently defunct body laid on top of another pretty well decayed corpse, the head upon the feet of the previous burial below it, neither of the bodies being of the "notable" class, if the "notables" can really be distinguished from the unimportant persons. There was on Timor-laut practically no *interment*, as few places on the island presented more than a couple of inches or so of soil, accumulated upon a hard coral conglomerate floor. The excavation of a grave, consequently, presented almost insuperable difficulties to these natives, poorly provided with excavating tools. As far as orientation goes, notables and commoners were treated alike, except that the corpses of the better class were usually encased in a canoe-coffin, often placed on a pile-platform specially erected for it within, or in shallow water just beyond, the tide mark generally pointing seaward. Its compass-bearing, therefore, would naturally vary with the sector of the circumference of the island on which it was erected.

The coral pyramid with the fewest bodies and most room, would as a rule be chosen for the last resting-place of the most recent burial—both important and unimportant—and its orientation might be any point of the compass, for these coral blocks were not weathered for the express purpose of providing burial stands for the Tenimberese dead, and would obviously sometimes point seaward, sometimes lie parallel to the shore, two neighbouring bodies therefore being often at right angles to each other, though their ghosts would be both bound, I suppose, for the same heaven. I failed to discover that these people had any idea of whence they had come to Timor-laut. They certainly were a mixed people and the majority probably came from eastward. Anyway they all adopted the same orientation or want of orientation. Their souls, they believed, went to Ghost island—Nusa nitu (as Mr. Perry's "Nusnitu" should be written), a land lying somewhere westerly but of uncertain location.

Mr. Perry, I observe, speaks of the "Tenggerese of Bantam." Bantam is the westernmost part of Java, and the larger part of "Sunda" or the region west, say, of the longitude of Bantam. The people referred to inhabit the Tengger mountain in East Java, and far from Bantam. The "Javanese" inhabit Java east of the longitude I have named, and are quite a distinct people from the Sundanese. "The badoej of Bantam" are also referred to by Mr. Perry. No two authors seem capable of using the same orthography for these people, much to the confusion of readers not personally familiar with the tribe or their residence. The correct spelling of this peculiar tribe is either Baduwi, as almost universally employed in Netherland's Indian publications, or Badui. The Baduwi, the Kalangs, and the Tenggerese are small isolated, peculiar communities, believed to be aliens in Java and to belong to one and the same stock; many of their curious rites and customs are the same. The orientation of their dead one would expect to be the same, if Mr. Perry's hypothesis be correct, but each appears to adopt a different orientation for them.

So far as my small experience goes, the orientation of native houses in Java, Sumatra, Timor, Timor-laut, Buru, the Moluccas, and numerous districts in New Guinea, I detected no sure indications that their positions were not due purely to suitability of site.

HENRY O. FORBES.

Australia.

Brown.

Australian Rafts. By A. R. Brown.

In the *Journal of the Anthropological Institute* of 1905 (xxxv) Mr. N. W. 4 Thomas published an exhaustive monograph on Australian canoes and rafts. I venture to offer a slight addition to, and rectification of, that paper so far as it refers to rafts in Western Australia.

Referring to two rafts found on different occasions at the mouth of the Gas-

coyne River (page 70), Mr. Thomas, relying on the statements of his authorities, says, "there is thus every probability that they had come down the river." This is probably wrong. After heavy rains the bed of the Gascoyne is flooded and the river may run for several days, but during the greater part of every year (and the river does not run every year) the bed is dry save for pools of no great depth or size. On such pools rafts would be of no service to the natives, and inquiries among the natives themselves leave me satisfied that they were never used. On the contrary, such rafts were formerly in use along the coast, and it is highly probable that the rafts in question had been used for the purpose of crossing the sea-water creeks that separate Babbage Island from the mainland and that form the two mouths of the Gascoyne River.

There were formerly two different types of raft in use on the coast of Western Australia. One type of raft consists of a single log of light wood (cork-tree seems to have been a favourite for this purpose), or occasionally of two logs pegged together side by side. On either side of the raft (whether composed of one log or two) a row of wooden pegs was driven in at an angle of about 45 degrees from the horizontal. Twigs or grass were usually twined in between these pegs. The purpose of these pegs was to enable the man sitting on the raft to keep it steady, which he did, I believe, with his feet.

Such rafts, consisting in nearly every case of but a single log, were used along the coast from Shark Bay northwards to the southern end of the Ninety Mile Beach. Each raft would carry only one man, who paddled with his hands. They were used for visiting the reefs and islands off the coast, for the purpose of procuring fish, turtle, and dugong. At the present day they are rarely, if ever, used. My description is based on the statements of natives and of white settlers who have seen them in use in former times. The rafts referred to by Mr. Thomas as discovered at the mouth of the Gascoyne, and seen by Gregory further north, belong to this type, and the figure of a man paddling a raft at Rosemary Islands shows the way in which it was used. Along the stretch of coast mentioned this was, I believe, the only type of raft that was ever used.

Northward from the Ninety Mile Beach single logs are occasionally made use of as rafts, but I have been unable to obtain any evidence of the use of a raft of the type just described, with its rows of pegs on each side. On this part of the coast the raft in regular use is formed of a number of poles (usually of mangrove wood) pegged together side by side, with all the narrow ends of the poles at the same end of the raft, giving it an almost triangular shape. A raft of this type is in the West Australian Museum at Perth. Mr. Thomas gives a description and figure of this type after Stokes. It is in regular use along the north-west coast from the Ninety Mile Beach to about Port Darwin. A raft will carry two men and may be paddled with a spear or with a piece of bark. The natives study the set of tides and currents (which are very strong on this coast) and make use of them in travelling among the islands and inlets with which the Kimberley coast abounds.

It may be noted that the boundary between these two types of raft coincides with a boundary between two culture-areas with marked differences of technology and language.

A. R. BROWN.

Superstition.

The Growth of a Legend in Egypt. By G. A. Wainwright.

Superstition may conveniently be said to be the result of mistaken explanations of genuine observed facts, and in this way the most wonderful legends may arise. Such is the case in modern Egypt to-day with regard to the British and their position in the land. The legend, though common enough among the

Wainwright.

5

fellahin and firmly established among them, does not seem to be known to the British population. I first heard of it from one of the tomb guards at Sheykh abd el Gurneh at Luxor four or five years ago. This reminded me of allusions and remarks I had heard in previous years, and as opportunity arose from time to time I led conversations on to the subject of the British occupation and Christianity. I thus found that every one of the Qufti workmen was well acquainted with the belief, and during the last two years I have also heard it alluded to by the inhabitants of the two Abydos villages, el Arabat el Madfunah and Beni Mansur. It is referred to in ordinary conversation, without the necessity of giving details, just as are other well authenticated (!) pieces of common knowledge. The story runs as follows :—

The English are Christians, but are not the same as other Christians, in that they are the Beni Koreish, the tribe of the Prophet himself, and are *Shereefs*. This is proved by the fact that every (!) Englishman wears a piece of green in his hat, just as the *Shereefs* wear a green turban. If the green is not visible it does not matter, one would be certain to find it hidden away somewhere. In the time of the Prophet the Beni Koreish were obstinate and refused to believe, in spite of manifold signs. This led to endless fighting and trouble, and at last they went away northwards to Syria, and were lost to the Mohammedan world. Presumably they travelled far and reached England, but history does not relate this, it passes direct to the fact that after some twelve hundred years the Beni Koreish have returned to Egypt in the guise of English, "who ride kings of the earth." The good Muslim of the villages is pleased to note that in the course of ages the Beni Koreish have so far mended their ways as to become Christians, and he realises that in the next world these *Shereefs* will become Mohammedans of much honour.

The underlying facts of this legend are :—

- (1) That the English Christians are by the will of Allah in authority over the true believers.
- (2) That the English very commonly wear a green lining to the brim of their sun helmets.
- (3) That green is the sacred colour of Mohammedanism and is affected by the *Shereefs* of or descendants of the Prophet.

On this basis of fact the mistaken structure is built up. Ignorant country—Egypt does not know that the green is worn as a restful colour to the eyes in the glare of the sunlight, nor does it know that other European races are at liberty to wear it if they choose. In fact, one of my informants elaborated a little, and added that specific piece of information, that no Frenchman, no German, no Italian, and no Greek, who were the only European races he knew besides ourselves, were allowed to wear the sacred green. The only man I ever heard to even want my verification of the fact (!) of our being the Beni Koreish was the Omdeh of Beni Mansur this summer, who, after affirming such to be the case, asked whether it were so or not, and had I ever heard it in my "village." To which I, with recollections of Philo-Israelite discussions, was happy to reply that I had often heard that we had come from Syria and were the Chosen People. This completely satisfied the company and completely drowned any embryonic doubts in the Omdeh's mind.

The story is interesting as evidencing the steps in the growth of a modern legend, the necessity for which was occasioned by a state of affairs contrary to that which preconceived ideas demanded. But besides being of scientific interest, it is also of considerable political importance, for owing to it there is no religious animosity against us in the countryside; but if anyone even questions our position in Egypt, he can always be silenced by an appeal to it.

Another thing which the *fellahin* say of our presence in Egypt is not so flattering,

for they say that the "*tyab* brought us." The *tyab* is the wind that brings the locusts, and the connection is that just as the locusts come from Heaven-knows-where, so do the British come up out of space, no one knowing their home. G. A. WAINWRIGHT.

REVIEWS.

India.

Rose.

A Glossary of the Tribes and Castes of the Panjab and North-West Frontier Province. Vol. II, A to K. Vol. III, L to Z.

6

In these two volumes we have the result of the labours of Mr. H. A. Rose in collecting and classifying the information available regarding the castes and tribes of the Panjab and of the North-West Frontier, which until recently formed part of the same province. Mr. Rose is well known to students of Anthropology and Folklore by his numerous excellent studies on these subjects, and is admirably qualified for his task. Vol. I, which has not yet appeared, is to contain the substance of the reports of the late Sir Denzil Ibbetson, the founder of scientific ethnography in the Panjab, and of Mr. Maclagan's report on the 1891 census. The volumes which have appeared contain the actual glossary, for which Mr. Rose has not only drawn on the work of many previous investigators but has supplemented it by much valuable original work.

From the anthropological point of view the Panjab and North-West Frontier form one of the most interesting regions in India, and these volumes supply a much felt need, and in the value of their contents take a worthy place beside Risley's work on Bengal, Crooke's on the United Provinces, and Thurston's on Southern India. North-Western India has from prehistoric times been the scene of invasions from the Persian plateau and from Central Asia, and the dawn of history, as revealed in the hymns of the Rig-Vêda, finds an Aryan population settled along the banks of its glacier-fed rivers gradually forcing their way against the dark aboriginal population, which nevertheless, though subdued, was not exterminated, and in varying degrees pervades the province till the present day. The process of invasion and settlement was repeated again and again.

Sometimes the invaders were only armies, at others they were complete tribes, and the extent to which they have been assimilated or have maintained a distinct character is evidently dependent on these conditions. Thus the Macedonians who accompanied Alexander, Demetrius, or Menander have been lost, and the same may be said of the mixed horde of Turks and Iranians who formed the armies of Mahmûd of Ghaznî and Muhammad bin Sām, the Ghori king, while distinct tribes still represent the descendants of Kurshans and Ephthalites and are now to be found as Rājputs, Jats, and Gūjars. So also the invasions of Bābar and Nādir Shāh in more modern times have left little trace on the population, while the tribal Afghāns and Balōches still occupy large areas as distinct communities. It is evident that in the country which has borne the brunt of all the invasions of India, the scope for variety of tribal and caste organisations and of physical structure is enormous. In this glossary we have a picture of the result as it exists at the present day.

The variety is accentuated by religion. Many of the invading tribes adopted the Buddhist faith, which was predominant in Northern India during the centuries immediately before and after the beginning of the Christian era. With the decay of Buddhism these were absorbed into the Brahmanical system, and tended to form castes with a distinct place in the Hindu hierarchy; other new-comers were Muhammadan, and their faith spread also among the older population, some being converted in whole and some in part to the new faith. But a change in creed does not imply a change in custom, and here again there is a fertile field for enquiry which later observers like Mr. Rose himself and Major A. O'Brien are working successfully. In the present glossary, customs and social usages are fully described,

as, for instance, in the article on the Kanēts of Kāngra, Kullu, and the neighbouring Hill States in the Eastern Panjab Himalaya—a peasant tribe akin to the Rājputs but occupying a subordinate position. Here, after a description of the divisions and distribution of the tribe, an account of the customs prevalent in Kullu follows (taken from Sir James Lyall's Kangra Settlement Report), and an account of the customs of the Kanēts of Bashahr by Pandit Tika Rām.

Articles of importance which should be consulted by all interested in the subject are those on the Gūjar, Jat, Rājput, Pathān, Balōch, Khatri, and Arōrā tribes or castes, all of which have an extraordinary variety of clans and subsections many of which are of sufficient importance to deserve long articles to themselves. This also applies to several of the smaller tribes not included under any of these comprehensive names, *e.g.*, the Khokhar tribe, which played an important part in Panjāb history.

It is to be regretted that a work of such importance, which must for a long time to come remain the principal work of reference on the subject, has not been produced in better style. The type is poor, imperfect or broken letters being common, and misprints are abundant. On this point I may be allowed a personal complaint, as, in a passage which Mr. Rose has done me the honour to quote (from the article "Afghanistān" in the *Encyclopædia of Islam*), nonsense is made by the conversion of an *l* into an *i* (Vol. II, p. 218, l. 1). I said that Raverty's identification of the Greek Paktyikē with the modern Pakhli was not impossible "considering how frequently an ancient dental passes into *l* in Pashto," and the *l* here is turned into *i*. On the same page Ptolemy's names, Paropanisadai, Bōlitai, and Aristophylōi (which I had given correctly in Greek letters) become Paropenisadai, Bohitai, and Aristophaloi. A provisional list of addenda and corrigenda for Vol. II has been issued, but it does not deal with misprints.

This is the more to be regretted as the works alluded to at the commencement of this review, relating to the castes and tribes of other parts of India, have been well printed and brought out in a good style, and the same may be said of the excellent series of monographs issued for the Assam Government.

The Panjab Government is not doing justice to the work of its officers in allowing this book to appear in such a slovenly form.

M. LONGWORTH DAMES.

Egypt.

Peet.

The Stela of Sebek-khu: the Earliest Record of an Egyptian Campaign in Asia. By T. Eric Peet. Manchester: The University Press, 1914. **7**

Our thanks are due to the authorities of the Manchester Museum for this handy re-edition of a very important historical inscription, and Mr. Peet is to be congratulated upon the excellent way in which he has acquitted himself of the task. Autobiographical texts of the Twelfth Dynasty are by no means common, and the career of Sebek-khu was conspicuous for the part he took in punitive expeditions to Asia and Nubia under the third king of the name Senuoret. The principal interest centres in the account of the fighting on Asiatic soil, for this is one of the earliest explicit narratives of warfare against the eastern neighbours of the Egyptians. Sebek-khu relates that when his Majesty went downstream to overthrow the Menthu of Setet, he arrived at a region the name of which is Sekmem. There he turned homewards, and as he did so was attacked in the rear both by Sekmem and by certain Asiatics of Rethenu who had come to its support. Sebek-khu distinguished himself greatly in the fighting, and was generously rewarded by the Pharaoh.

Mr. Peet's edition comprises both a photograph and a hand-copy of the hieroglyphic text, the latter embodying a new collation of the original; also a translation,

followed by philological notes, and finally a discussion of the historical bearings of the inscription. Mr. Peet rightly holds W. Max Müller's identification of Seknem with Shechem far too arbitrary to be accepted, though he agrees that the scene of the conflict was Palestine.

Few criticisms are needful, nor if they were would this be the place for them. The only serious misconception is with regard to the words "there were given to me 100 men as a reward" in line 17, and a similar sentence two lines earlier. This does not mean that Sebek-khu was given command of a hundred men (page 13), but that a hundred men (probably captives) were given to him as slaves; the parallel passages in the biography of Ahmōse (SETHE, *Urkunden IV.*, 6), and in the story of the "Shipwrecked Sailor"* are decisive on the point. ALAN H. GARDINER.

Anthropology.

Ellis.

Man and Woman: A Study of Human Secondary Sexual Characters. By Havelock Ellis. Fifth edition, revised and enlarged. Walter Scott Publishing Company. 1915. Price 6s. **8**

It is late in the day for a British anthropologist to pay a just meed of praise to Mr. Havelock Ellis for a book which has won recognition from students of all nations, and which has now appeared as a "fifth edition, revised and enlarged." At the present day we are too apt to reserve our admiration and our approbation for the man who works in a laboratory and publishes the results of his investigations in the recognised professional or technical journals. We do ourselves and our science a wrong when we overlook or cheapen the works of men who compile really good and useful books. We should do Mr. Havelock Ellis a further wrong if we regard him merely as a compiler. He is a thinker, perhaps not a deep thinker, but he is sincere, and in search of truth and not of self. The fifth edition of *Man and Woman*, like its predecessors, is a standard book, and yet, even like the best standards, it has its defects.

In the various prefaces the author shows us how the book came to be written, and how it grew and prospered in his hands. About the year 1882 Mr. Ellis became interested in the perennial question—the constitutional differences between men and women. He recognised then the bearing that the correct answer to this question had on the solution of many social problems. He could "find no full and unprejudiced statement of the precise facts." The book, which we all know under the title of *Man and Woman*, is the result of Mr. Ellis's self-appointed task—a digest of all known facts relating to the differences between the two sexes. His book has served not only to make its author think—it has been the cause of thought in every anthropologist who has opened its pages. Nothing is more wonderful, and in the light of our present knowledge more mysterious, than the fact that although man and woman issue from the same womb they are yet radically different, even to the minutest detail—from the fashioning of their little toes to the manner in which they button their garments. Mr. Ellis does not explain how these differences have come to be, but he does the next best thing—he gives a readable catalogue of the facts which some day will yield the key to the riddle of sexual difference.

No one who is familiar with the works of Darwin can fail to recognise the exemplar Mr. Ellis strives to follow. His method and his style are Darwin's. There is the same patient collection of facts, the same balanced judgment in accepting certain observers as reliable authorities; the same calm and easy statement of the problem and the orderly array of data to guide the reader to a conclusion. There

* Line 179: "I was made a henchman and rewarded with 200 men." It is astonishing that none of the translators of this tale has recognised the word "two hundred," which has hitherto passed for the pronominal suffix "his."

is no special pleading; the jury of his readers must reach the verdict indicated by a survey of the known facts.

As we have already said Mr. Ellis confines his endeavours to the drawing of an exact picture of the sexual differences in mind and body which distinguish woman from man. He has given us by far the most exact and complete picture that has ever been drawn. But beneath the surface of the facts he has not sought to go. He is impressed by the importance of internal secretions—the secretions thrown into the circulating blood by the ovaries—or testicles—in determining very different the constitution of body and mind of man and woman. Internal secretions are but parts of a biological machinery; the origin and differentiation of sex lies deeper than internal secretions. Mendel got nearer the truth, but of Mendelism Mr. Ellis has nothing to say.

The final conclusion regarding the social status of woman reached by Mr. Ellis may be given in a quotation from the preface to the fifth edition of his work. Some years ago Mr. Ellis came upon a remarkable book written nearly a century ago by the Vicomte J. A. de Ségur, *Les Femmes leur Condition et leur Influence dans l'Ordre Social*. "The object of my work," states the Vicomte, "is to prove that the two sexes are equal though different; that there is a complete compensation; and that if one sex seems to possess essential qualities that the other lacks, we cannot refuse to that other not less precious qualities which are peculiar to it." This is also Mr. Ellis' final conclusion as expressed in *Man and Woman*.

A. KEITH.

Sociology.

Keller.

Societal Evolution: a Study of the Evolutionary Basis of the Science of Society. By Albert Galloway Keller, Professor of the Science of Society in Yale University, New York. The Macmillan Company, 1915.

To constitute a science of society is necessarily to connect it with the natural sciences, especially biology; and any attempt by a competent man to do this, such as the present study by Professor Keller, deserves attention. His purpose, he tells us in the introduction, is to interpret the growth and differentiation of societies according to the Darwinian theory, not merely by analogy with plants and animals, but as presenting the very same processes. The Darwinian theory is built upon the facts of variation, heredity, selection, and (as the result of these) adaptation; does society life involve processes that are the same as these; and if so, what are they?

A civilised society exhibits complex institutions; but these had their beginnings in some sort of simple and habitual reactions, initiated by individuals, and (if successful) imitated by others, so that they turned into customs and conventions, or "folkways;" and "a considerable degree of concurrence having come about with regard to certain folkways, these are taken to be conducive to group-welfare, and presently receive social and religious sanction and become mores." The "folkways" then are the simplest and most fundamental society phenomena, and in them occurs the variation that is the first process of society evolution.

That variation of behaviour and custom does occur, in spite of the resistance of old customs, is plain. Professor Kelly would have done well to indicate more clearly some of the chief causes of such change, but one may begin with the fact. Upon that fact selection operates; out of countless individual tentatives only a few are imitated, and so are selected to become customs, and customs in turn are modified by selection among the variations that arise in them by further individual tentatives. How does this selection take place?

First by war, which in extreme cases extirpates a group of customs along with

those who practise them; in other cases modifies them by subordination of the conquered. There are harmful customs—as that the old men should marry the young women and the young men the old women—which weaken a nation and lead to its overthrow. Other conditions of selection are persecution and legal repression, which destroy unpopular departures from the folkways; and there is the milder method of ridicule. As for rational selection, many customs appear to be rational that were not adopted on rational grounds. It is very difficult to convince the general mind by reasoning upon most questions, because it is difficult to verify the reasoning in such a way as to bring it home to each man's interests. In the field of societary self-maintenance, however, something may be done by reason; and as the activities of self-maintenance are primary and essential, there is a tendency for all other activities to be moulded into consistency with them.

An interesting chapter (vi) discusses counter-selection, namely, that which results from the selection, in civilised countries especially, of the biologically less fit.

The transmission of customs depends partly on heredity—that is, on the inheritance of dispositions favourable to them or the reverse—partly on tradition, by teaching and by imitation.

The adaptation of customs is most easily perceived in the case of primitive peoples, as determined (*a*) by physical environment, (*b*) the condition of living with one's fellow men, and (*c*) the desire to pacify the ghosts and spirits. In general it may be said that “the organisation for self-maintenance is of necessity directly “ adapted to natural conditions; then, on the principle of consistency in the mores, “ the rest of the societal system conforms to the maintenance system.”

It will be seen that Professor Kelly has set himself a definite task, and has definite ideas of how to accomplish it. He makes generous acknowledgments to the late W. E. Sumner, whose writings deserve to be better known.

CARVETH READ.

Anthropology.

Temple.

Anthropology as a Practical Science: Addresses delivered at meetings of the British Association at Birmingham, the Antiquarian Society of Cambridge, and the Anthropological Society of Oxford. By Sir Richard C. Temple, Bt., London, Bell and Sons, Ltd., 1914, pp. 96, 19 cm. Price 1s. net. **10**

Anthropologists who are interested, as all should be, in the movement to secure greater knowledge of native races among our officials and administrators, will be grateful to Sir Richard Temple for the convenient form in which he has now published these three addresses. The earliest, that delivered at Cambridge, dates from so long ago as 1904; the latest and most important was given at the meeting of the British Association in 1913. In addition to his address as President of Section H, Sir Richard Temple has reprinted the communication with which he opened the discussion at Birmingham on a School of Applied Anthropology, and a condensed summary of the discussion which followed, and was reported in MAN, 1913, 102. **11**

E. N. F.

ANTHROPOLOGICAL NOTES.

ONE of the Royal medals for work in the Biological Sciences has been conferred by the Royal Society on Dr. W. H. R. Rivers, Fellow, and Member of Council, of the Royal Anthropological Institute. Dr. Rivers' work is too well known to require comment, and British Anthropologists will be grateful to him for having won this distinction for the science in which they are interested.

CAPTAIN T. C. HODSON, Hon. Secretary of the Royal Anthropological Institute, has been awarded the "Palmes académiques" by the French Government for his work as a railway traffic officer in France.

12

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL
INSTITUTE.

13

The Dramas and Dramatic Dances of Non-European Races in Special Reference to the Origin of Greek Tragedy. By William Ridgeway, Sc.D., F.B.A. $10\frac{1}{4} \times 6\frac{1}{2}$. 422 pp. Illustrated. Cambridge University Press. (The Publisher.)

The Transportation of Débris by Running Water. By Grove Karl Gilbert Professional Paper. Department of the Interior, U.S. Geological Survey. $11\frac{1}{2} \times 9$. 259 pp. 3 Plates. Government Printing Office, Washington. (Department of the Int. U.S. Geological Survey.)

The Northern Bantu. An Account of some Central African Tribes of the Uganda Protectorate. By John Roscoe, M.A. $8\frac{1}{2} \times 5\frac{3}{4}$. 293 pp. 22 Plates. Cambridge University Press. 12s. 6d. net. (Publishers.)

Morphology and Anthropology. By W. L. H. Duckworth, M.A., M.D., Sc.D. Second Edition, Vol. I. $9 \times 5\frac{3}{4}$. 298 pp. Illustrated. Cambridge University Press. 10s. 6d. (Publishers.)

Indian Fairy Stories. By Donald A. Mackenzie. $8 \times 5\frac{1}{2}$. 200 pp. With Illustrations. Blackie & Son, Ltd. 3s. 6d. net. (Publishers.)

The Caliphs' Last Heritage. A Short History of the Turkish Empire. By Lieut.-Colonel Sir Mark Sykes, Bart., M.P. $8\frac{3}{4} \times 5\frac{1}{2}$. 588 pp. Many Illustrations and Maps. Macmillan & Co. 20s. net. (Publishers.)

The Ancient Coinage of Southern Arabia. By G. F. Hill. $9\frac{3}{4} \times 6$. 28 pp. 1 Plate. The British Academy. 2s. net. (Author.)

An Introduction to the Study of Prehistoric Art. By E. A. Parkyn, M.A. $9\frac{1}{4} \times 6$. 337 pp. 16 Plates (2 coloured) and 318 Illustrations in Text. Longmans, Green & Co. 10s. 6d. net. (Publishers.)

Myths and Legends of Ancient Egypt. By Lewis Spence. $8\frac{3}{4} \times 6$. 326 pp. 16 Plates in colour and 32 other Illustrations. George G. Harrap & Co. 7s. 6d. net. (Publishers.)

Fairy Tales from Norfolk. By Honor Elwes. $7 \times 4\frac{3}{4}$. 106 pp. John Dicks Press, Ltd. 6d. (Publishers.)

Descriptive Handbook to the Relief Model of Wales. By Wallace E. Whitehouse. With an Introduction by Professor H. J. Fleure. $9\frac{3}{4} \times 7\frac{1}{4}$. 61 pp. 7 Plates. Museum, Cardiff. 6d. (Curator.)

Theism and Humanism. Being the Gifford Lectures. By the Right Hon. A. J. Balfour. $9 \times 5\frac{3}{4}$. 274 pp. Hodder & Stoughton. 10s. 6d. net. (Publishers.)

Miscellaneous Coptic Texts in the Dialect of Upper Egypt. Edited, with English Translations, by E. A. Wallis Budge, M.A., Litt.D. $8\frac{3}{4} \times 5\frac{3}{4}$. clxxxi + 1216 pp. With 40 Plates and 20 Illustrations in the Text. British Museum. 2l. (The Director.)

Rumanian Bird and Beast Stories. Rendered into English by M. Gaster, Ph.D. $8\frac{3}{4} \times 5\frac{3}{4}$. 368 pp. Sidgwick and Jackson. (Publishers.)

Children's Stories from the Northern Legends. By M. D. Belgrave and H. Hart. Illustrated by H. G. Theaker. $9\frac{3}{4} \times 7\frac{1}{2}$. 144 pp. Raphael Tuck & Sons. 3s. 6d. net. (Publishers.)

Lullabies of the Four Nations. Arranged by Adelaide L. J. Gosset. $8\frac{1}{4} \times 6\frac{1}{2}$. 261 pp. Illustrated. Alexander Moring, Ltd. 7s. 6d. net. (Publishers.)

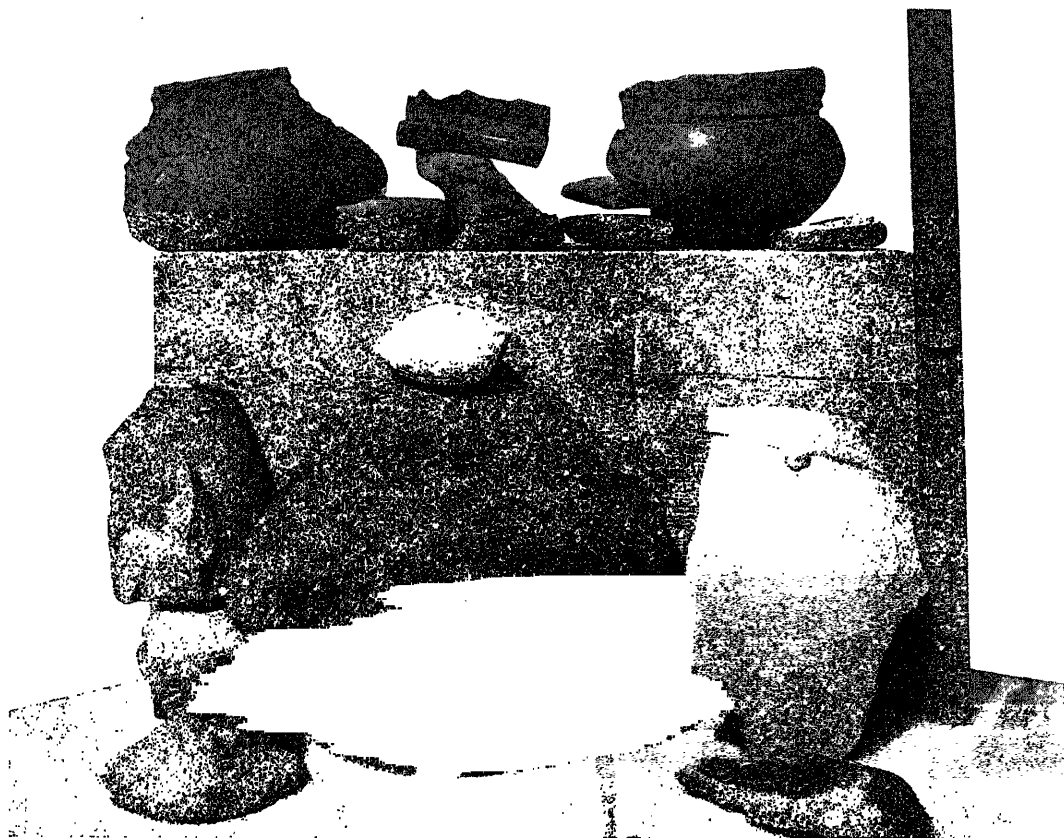


FIG. 1.

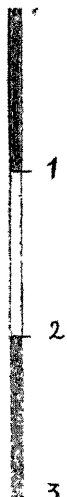


FIG. 2.

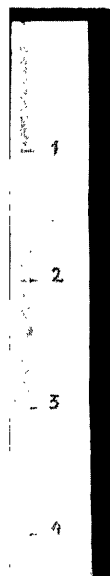


FIG. 3.



FIG. 4.

ORIGINAL ARTICLES.

Archæology.

With Plate B. Ashby—Zammit—Despott.

Excavations in Malta in 1914. By T. Ashby, T. Zammit, and G. Despott. (See MAN, 1916, 1).

14

III.—PRELIMINARY REPORT ON EXCAVATIONS IN THE CAVE OF GHAR DALAM.

Ghar Dalam (the Cave of Darkness) is a cavern on the N.E. side of the ravine of the Wied-x-Dalam, about 500 yards to the N. of the shores of San Giorgio a Mare, one of the bays in Marsascirocco Harbour. Its greatest length is about 700 feet. The width at the mouth is 26 feet and the height 10 feet. The inside, however, varies considerably both in width and height; in some parts it is as much as 60 feet wide and 18 feet high, but at the further extremity it is so low and so narrow as hardly to allow one to pass. In many places the sides of the cave are covered with stalactitic formations. The cave must, indeed, have been partly submerged in the period when Malta became detached from the continent to which it had belonged* by the general lowering of the level of this portion of the earth's surface; and the animals whose bones are found in it must have been washed in when already dead, and their skeletons broken up by the water, for the bones are found in utter disorder. The pottery which is found with them ranges from the Neolithic to the Punic period, and there is obviously no stratification. This must have been lost by the action of water, and, indeed, even now much moisture percolates into the cave.

i. Ghar Dalam was first excavated by Professor Issel,† who in 1865 made a trench 60 cm. deep, about 100 paces from the entrance, and in it found several bones of mammals associated with fragments of pottery. It is mentioned by Leith Adams (*Nile Valley and Malta*, page 250n) as a site which would probably prove profitable for research, though he did not investigate it, as it was "much obstructed towards its entrance by stones and rubbish." As this cannot truly be said of it now, it would seem that some radical change in its condition must have occurred since he wrote in 1870.

ii. Mr. J. H. Cooke‡ was the next to make excavations. In 1892 he dug eight trenches of various sizes and depths, the first being 350 feet from the entrance, the last only about 30 feet. It is said that cart-loads of animal remains were then taken out of the cave. Of these, however, very few have found their way to the Malta Natural History Museum, and these are by no means perfect specimens.

Amongst the remains discovered by Mr. Cooke, according to the report of Dr. Smith Woodward, of the British Museum, the animals identified were:—

- (1) Bear (*Ursus arctos*?).
- (2) Wolf.
- (3) Elephant (*Elephas mnaidrensis*).
- (4) Hippopotamus (*Hippopotamus pentlandi*).
- (5) Stag (*Cervus elaphus* var. *barbarus*).
- (6) Man—third metacarpus.

All these were found, together with potsherds, in what is called the cave earth. In the superficial deposits the organic remains found were:—

- (1) Pig.
- (2) Sheep or goat.
- (3) Ox.
- (4) Dog (as large as a wolf), metacarpus.
- (5) Small horse or donkey, canon bone.

* See Hobbs in *Scottish Geographical Magazine* in "Outlook."

† Issel, A. "Note sur une caverne à ossements d'été de Malte," in *Materiaux pour l'histoire de l'homme*, Janv. 1866.

‡ *Proc. Roy. Soc.*, February 23, 1893, Vol. LIV, p. 274.

The cervine remains, according to Mr. Cooke, belonged to individuals in several stages of growth.

After Mr. Cooke, other collectors made casual excavations, the results of which were never made public, and we only know from the workmen who were then employed that a good number of bones and pottery were then discovered and taken out of the cave.

iii. In the winter of 1912-13 Professor Tagliaferro, assisted by Mr. Giuseppe Despott, Curator of the Malta Natural History Museum, conducted a partial excavation in the cave at a distance of about 350 feet from the entrance, *i.e.*, a little further in than the first trench dug by Mr. Cooke.

These consisted of two trenches, one on each side of the cave, divided from each other by means of a huge mass of rock which, according to Mr. C. Rizzo, P.A.A., the engineer of the Public Health Department, had fallen from the roof of the cave. The trench on the right-hand side was about 5 feet long by 4 feet wide and 6 feet deep; in it were found several bones of hippopotamus but very few potsherds. In the trench on the left-hand side, which was about 7 feet long and from 2 to 2½ feet wide, and varying in depth from 3 to 5 feet, animal remains were very scarce, but pottery was abundant.

It consisted mostly of neolithic or æneolithic potsherds of a fawn or reddish colour; amongst them, however, there are also some of a red and black colour, and one piece entirely black; in thickness they vary from 2 cm. to 4 mm., the average thickness being 9 mm.

The forms of the vessels, as far as they can be ascertained, were bowls and cups.

The sherds which have markings on them are very few, and the engravings are very coarse.

Besides the prehistoric pottery, there are also parts of a Punic wheel-made amphora, whose diameter must have been about 40 cm.; the thickness of these sherds varies from 7 to 9 mm.

The most important of the prehistoric fragments are the following (Fig. 1, text):—

- (1) Fragment of vase with part of handle, engraved, length 7 inches.
- (2) Fragment of cup with rough engravings, about 3 inches long.
- (3) A sherd with a coarse engraved line, probably a cup, 5 inches long.
- (4) Fragment of a prehistoric amphora, having punctures as ornaments, length about 8 inches.
- (5) Cup, also prehistoric but of a finer make, 4½ inches in diameter.
- (6) Fragment of bowl with handle, about 5 inches in diameter.
- (7) Fragment of vase with embossed zig-zag ornament, length 3 inches.
- (8) A good part of a jug of the roughest prehistoric kind, length 8 inches.
- (9) Part of a vase with an embossed ornament like a handle, 4 inches long.
- (10) Fragment of a vase of a rough ware, with a rough incised line, length 4 inches.
- (11) Handle, with a part of vase of a somewhat finer texture, length 6 inches.

In May 1914 further excavations were made by Dr. Ashby, with the assistance of Mr. G. Despott, by whom the animal remains were identified, also of Mr. C. Rizzo, and of Dr. R. Castillo. Two trenches were made, one on each side of the cave. The trench on the right was 200 feet from the entrance, 6 feet long by 5½ feet wide, and from 8 feet to 10 feet deep. The earth deposits and animal remains found in it were the following:—

In the superficial deposits, which consisted of rounded stones of several sizes and a loose whitish dust, none of the shells or animal remains mentioned by Mr. Cooke were met.

The 1st layer of cave earth consisted of red earth 1 foot deep, and contained a well-preserved part of left mandible of sheep or goat, three molars, some fragments of incisors, a metatarsus, and a phalanx of hippopotamus (*H. pentlandi*), the heads of the limb bones of stag (*C. elaphus v. barbarus*). Associated with these were two sling stones (Pl. B, Fig. 4), and many potsherds of different kinds, the majority prehistoric.

The 2nd layer, also 1 foot thick, consisted of red earth and clay. From it five molars and other fragments of teeth and vertebrae of hippopotamus were obtained; with these were also found the upper part of a left femur of pigmy hippopotamus (*H. minor*), the head of left femur of stag, one sling stone, and six prehistoric sherds, one of which was of a red and black colour, and another with coarse ziz-zag designs engraved on it (Pl. B, Fig. 3).

The 3rd layer was composed of clay and a sort of loamy soil, 1 foot thick; the animal remains found in it were the following: Some limb bones and vertebrae of stag, an astragalus of hippopotamus, an ulna of a bird the size of a duck, and a limpet shell (*Patella tarentina*). No pottery of any sort was met in this layer.

The 4th layer (9 inches thick) consisted of a hard red earth and a whitish clay; several fragments of hippopotamus' bones were obtained

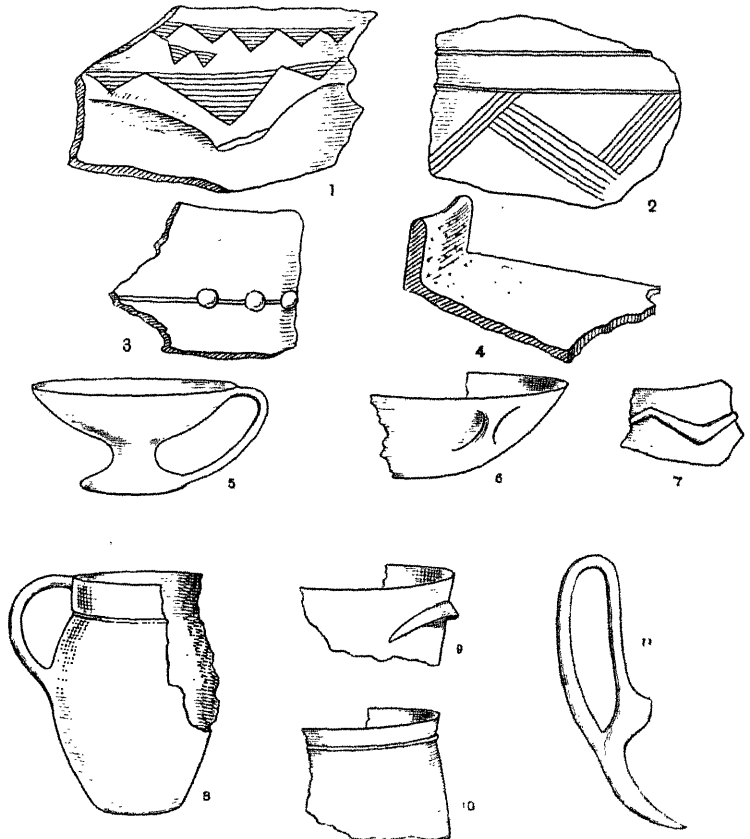


FIG. 1.

from it. At the same level with this layer, from under a stone projecting from the side of the cave, Mr. Rizzo extracted some molars and limb bones of hippopotamus in a very fine condition and an elephant's (*E. mnaidrensis*) molar. With these one potsherd was found.

The 5th layer (1½ feet deep) was composed of a red clayey earth; the objects met with in it were many bones of hippopotamus, some vertebrae of stag, and a fragment of pottery of a finer make than those found in the upper layer.

The 6th layer (1 foot thick) was of nearly the same material as the preceding, and in it only a tibia and some vertebrae of stag, in a very fragmentary state, were found.

The 7th layer, consisting of a hard white clay 6 inches thick, contained no animal remains.

In the 8th layer, which varied in thickness from 6 inches to 2 feet, consisting for the most part of clay, the remains of stag and hippopotamus were again discovered.

In the lower part of this layer, a large number of vertebræ, femurs, radii, and ribs of hippopotamus were found. At a depth varying from 8 to 10 feet from surface, what at first seemed to be the bottom of the cave was reached; this was strewn all over with the larger bones of the hippopotamus, and amongst them a whole mandible with molars of elephant (*E. mnaidrensis*). All these remains were covered with a coating of stalagmites in such a manner as to render it quite impossible to extract them save in fragments.

Under this came a stratum of a soft white stone, 1 inch thick, then again 6 inches of hard whitish clay, and under this what is probably the true bottom was reached—this consists of a white stone varying in consistency.



FIG. 2.

Facing the inside of the cave is a space (about 4 feet in circumference and varying in depth from $2\frac{1}{2}$ feet to 4 feet) between two huge stones, which evidently had fallen from the roof of the cave, and filled in for the greater part with clay, varying also somewhat in consistency. Here the greatest number of hippopotamus bones were found. Amongst them nine left scapulas could be identified, which, of course, prove the existence of at least nine individuals. A skull of the same animal was also found in this part; it measured 2 feet 3 inches from tip of snout to the occipital bones. Though every care was taken to extract this whole, after nearly a week careful digging around it, it began to crumble till it fell, together with a huge lump of clay, and was smashed to pieces. Fortunately, however, some photographs

were taken of it *in situ* (Fig. 2, text). A good part of an elephant's (*E. mnaidrensis*) scapula was found just behind the hippopotamus' pelvis, which, in the photograph, is seen just above the skull.

A claw of a bear (probably the same bear found by Mr. Cooke) was also obtained from this part of the trench.

Summarising the identified animal remains found in this trench, we have the following:—

- (a) *Elephas mnaidrensis*.—1 scapula, 1 mandible, 1 left molar.
- (b) *Hippopotamus pentlandi*.—9 scapulæ, left; 8 scapulæ, right; 3 sacra; 7 humeri, left; 2 humeri, right; 2 radius and ulna, right; 2 radius and ulna, left; 1 radius; 2 atlas; 2 axis; 5 tibiæ, right; 2 tibiæ, left; 4 astragali, left; 1 astragalus, right; 4 femurs, right; 1 femur, left.
- (c) *Hippopotamus minor*.—1 upper end of femur, left.
- (d) *Ursus arctos* (?)—1 claw.

No remains of stag were found in this part of the trench.

In the trench on the left side of the cave, which was about 20 feet long by $2\frac{1}{2}$ feet to 4 feet wide and from 2 feet to $3\frac{1}{2}$ feet deep, the earth was of the loose red kind all the way through, clay never being found. In most parts there was a layer of stones at the top, sometimes as much as 1 foot 6 inches in depth. Though there were no signs of stratification, some of the bones had a somewhat thick coat of stalagmitic formations around them, which proves that they had been moved about. From the surface of this trench some remains of the stag were obtained, amongst which were some fragments of antlers which had not been shed like those found by Mr. Cooke, as they had parts of the skull attached to them. The hippopotamus bones, relatively to the size of the place where they were found, were most abundant, and some of them in a very good state of preservation. They belonged to at least six individuals, as six left humeri have been identified already. Besides a great number of fractured bones, the perfect specimens of hippopotamus' remains extracted from this trench are the following: 5 scapulæ (left), 4 scapulæ (right), 5 sacri, 6 humeri (left), 4 humeri (right), 3 radius and ulna (right), 3 radius and ulna (left), 6 atlas, 1 axis, 3 tibiæ (right), 4 tibiæ (left), 4 astragali (left), 3 astragali (right), 2 femurs (right), 3 femurs (left).

The bones identified from both trenches are only a small fraction of what has been found during these excavations, the greater part are, however, in a very fragmentary state. We may also note a bone instrument (?), probably a borer (Pl. B, Fig. 2).

The greater part of the pottery is of the neolithic period, very rough and badly baked, with a reddish slip on dark grey paste. Among the more important fragments are the following (Pl. B, Fig. 1):—

- (1) Fragment of a dish 20 mm. in diameter with a flat bottom, in very rough ware.
- (2) Fragments of poorly baked reddish clay.
- (3) Fragment of a medium-sized vessel, with some attempt at burnishing; the outside is black and the inside reddish; thickness, 10 mm.
- (4) Another fragment of a similar pot, more finely worked and better baked, 5 mm. thick.
- (5) 2 sherds belonging to vessels of more elaborate ware, with a reddish slip inside and black outside; being badly fired these sherds have reddish flashes on the black over the outer surface.
- (6) A sherd 5 mm. thick, black on the inside and buff on the outside, well worked and hand burnished; it belongs to a small vase.

- (7) Another fragment of the same type, 15 mm. thick, black outside and reddish inside; it has also the red flashes due to bad baking.
- (8) A fragment of a vase 7 cm. long and 20 mm. thick, made of reddish clay having in it fragments of shells; on the surface of this sherd can be noticed curved lines very roughly incised, intended for ornament.
- (9) Fragment of a roughly made vase having a buff slip on both sides, thickness 5 to 10 mm.
- (10) A handle of a large jar, poorly baked and of a very fine texture; it belongs to the transition period between the Neolithic and the Punic.

Besides these there is also a good number of sherds belonging to vessels of undoubted Punic type, and the bottom of a vase of red clay with fine black paint, undoubtedly of Greek manufacture.

THOMAS ASHBY.
GIUSEPPE DESPOTT.

Burma.

R. Grant Brown.

Death Customs in Burma. By R. Grant Brown.

15

Mr. Perry's article on "The Orientation of the Dead in Indonesia," in the *Journal* for the second half of 1914, has suggested inquiry as to the treatment of the dead among the Burmese. The following notes are the result.

The corpse is invariably buried with its head to the east. In praying, a Burman Buddhist always turns to the east if there is no symbol of his religion in the neighbourhood, in spite of the fact that Gotama's country lies to the west of Burma. A Burman may sleep with his head to the east or south, never to the west or north. Solar myths are not particularly in evidence in Burma, and the people themselves do not connect the custom with the rising sun. It is possible that its origin may be, as suggested by Mr. Perry (following Herbert Spencer) the fact that the race migrated from the east, or in other words from China, where there are still tribes speaking languages closely allied to Burmese, and where such tribes were probably more numerous formerly than now. (The Tamans, for instance, undoubtedly came from China. See the *Journal* for the latter half of 1911.) But this does not explain the alternative allowed to the sleeper of lying with his head to the south, unless this is a Talaing custom, and the Talaings came by sea. More information is required regarding the customs of neighbouring races before any safe inference can be drawn.

In the funeral procession the corpse is always carried feet foremost. In Lower Burma great care is taken not to drop the coffin, or even to place it on the ground, on the way to the cemetery. If this happens it is believed that some one will die on that spot. When buried, the corpse must not face the village, but this prohibition also seems to be in force only in Lower Burma, and therefore to be of Talaing, rather than Burmese, origin.

The cemetery must be to the west or north of the village. This is merely the result of the idea that the east and south (south is the "honourable" quarter in China) are honourable and the west and north the reverse.

A corpse is never removed to a house before being buried. If a man dies outside his house, his body must not be placed in it, or even in the village, if he died outside the village.

In Upper Burma, drowned persons are buried near the water in which they were drowned, as far from it as a handful of water can be thrown; or, if the corpse is taken to a cemetery, water must be dropped along the path the whole way. It is believed that there will be a drought if this is not done.

In Lower Burma all the pots in the house are broken when the head of the household dies, but not when anyone else dies. Water is sprinkled on the place of

death (this is done in Upper Burma also) immediately after removal of the body, and along the path from the house to the gate of the compound. As water frequently takes the place of blood in Buddhist ceremonies, both these customs may perhaps be regarded as a survival of the practice of killing slaves on the death of their master.

The Burmese appear to have no ideas regarding the direction of the land of the dead, or of the country from which the race came.

The curious device of holding a complete funeral and burial ceremony in the hope of deceiving the Destroyer, and inducing him to leave a sick person alone, was fully described in MAN, 1909, 13, under the heading "Cheating Death."

The Burman regards it as a matter of course that the soul should continue to exist after death, and he believes that it remains in the house, and is cognizant of all that goes on there, for seven days. The bed of the deceased person is laid, and a fresh supply of food and water is placed by it every morning and evening. During the same period hospitality is offered to all who come, and monks are invited to preach as well as to eat. At the end of the seven days the spirit departs. According to my principal informant, he is ejected by the house-god, Min Magayi, the mighty blacksmith who was burnt alive by a king of Tagaung, and whose spirit watches over every Burman household. But during the seven days he is not absolutely confined to the house. He may wander about visiting the places he was wont to visit in life.

In 1907 the Civil Surgeon of Pyapon died while I was Deputy Commissioner of the district. He was a native of Arakan. The day after his death a messenger came to me from his widow asking me whether I would sign an order discharging him from Government service. The reason given was that his ghost had been walking about the hospital and disturbing the patients there. Until he was removed or allowed to resign he was still under the orders of his superior officers, and considered it his duty to go on with his work. I objected that I had no power to remove a Civil Surgeon, but was told that my order would be quite effective for the purpose. Of course I consented; but I was somewhat startled a little later when an official letter was placed before me, addressed to the dead man and informing him that he was removed from Government service, with effect from an hour and date mentioned, these being the hour and date at which he died. I signed the letter, and was told afterwards that it had had the desired effect.

A creditor has a better chance of recovering a debt from the dead than from the living, provided the deceased has relations who are concerned for his welfare. If the debt is not paid it is believed that the dead man will come into the creditor's power, as his slave (nowadays servant), his ox, or his dog. R. GRANT BROWN.

New Guinea.

Beaver.

A further Note on the Use of the Wooden Trumpet in Papua. 16
By W. N. Beaver, F.R.A.I.

In MAN, 1915, 11 (February), Dr. Seligman discusses the wooden trumpet as used on the southern slopes of the Hydrographers Range. A few remarks on the further distribution of this instrument may be of interest.

Dr. W. M. Strong, from whom Dr. Seligman obtained the specimen figured in MAN, states that he knows of the use of the wooden trumpet only in the region quoted, but I am able to point out from personal knowledge that its distribution is very much wider.

Naturally, the coast tribes use the ordinary conch shell as a trumpet, and the people of the hinterlands obtain their shell instruments from them in the way of trade; but the further one penetrates inland, the more difficult it becomes to obtain shells. I have found the wooden trumpet, almost identical with the instrument figured by Dr. Seligman, used over a large portion of the administrative Northern

Division of Papua; that is to say, throughout the region directly between the Hydrographers Range and the boundary of British Papua. To quote a few examples, I have found it used, together with the conch, among the Sangara on the northern side of Mount Lamington, among the Huhurundi living inland from Holnicote Bay, and among the Howajega, Asingi, and Tohani, all bordering about the main Kumusi River. In the trans-Kumusi region, towards the Yodda Valley, I find that the Autembo and other tribes use it more frequently than the conch. Only a week or so ago I found it in use in the valley of the Mamama, a tributary of the Kumusi rising on the southern side of Mount Lamington. I have also seen it used on both the middle and upper Waria, in what was formerly German New Guinea.

Now this is a tolerably wide distribution, and under no circumstances can the users be claimed to have had any communication with the Southern Hydrographers tribes. Of course it should be understood that the conch shell is also used.

I have a note that a bamboo tube is used instead of the wooden instrument among the Andakofu tribe (Sauni) in the trans-Kumusi region.

The ordinary conch shell trumpet varies in size up to about 20 inches long and about 9 inches across in the largest part. A hole from 1 inch to $\frac{3}{4}$ inch in diameter is made about 3 inches from the apex. Over water the reverberating note can be heard a very considerable distance.

Some details of the notation of trumpet blowing might be of interest. Of course, neither the drum nor trumpet "language" is in any degree

as rich as what I understand the West African drum "talk" is—in fact, the Papuan variety is very poor indeed, but it should be understood that certain distinct significance is attached to different notes or calls. This notation is chiefly on the long-short blast system, and I give some examples of shell trumpet calls from the Binandele tribes of the Mamba and Gira rivers. Naturally the significance varies according to the district:—

- (1) After killing in a fight when in camp and dancing :
 — — — — —, &c. (*i.e.*, long blast, short blast, long blast, short blast, &c.).
- (2) Calling to a fight, summoning to a fight, and going to a fight :
 — — — — — (*i.e.*, long blast, short, short, &c., and repeat).
- (3) Conveying the news of a death :
 — — — — — (*i.e.*, short, long, short long, &c.).
- (4) Men are bringing a pig :
 — — — — — (*i.e.*, long, short, long, &c.).

Nowadays No. 2 is generally used to call in the people from their gardens, say, for example, on the arrival of European or other strangers, or, again, half-a-dozen long blasts may convey the news that a Government party or Europeans are approaching.

W. N. BEAVER.

Palestine: Archæology.

Lewis.

A Note on Megalithic Monuments. *By A. L. Lewis.*

17

The questions raised by Mr. Peet and Professor Elliot Smith respecting megalithic monuments are so important that I should like to be allowed to state the conclusions to which I have been led by a study of the monuments, and of the literature concerning them, extending over fifty years. They are:—

- (1) *The origin of building with large stones need not have been, and probably was not, confined to one centre.*
- (2) *The vast extent of the countries in which building with large stones, whether worked or unworked, was practised, and the different ways in which it was applied, show that it was a local or tribal rather than a racial custom.*

(1) Such inventions as those of the mariner's compass, gunpowder, and the steam engine (the latter specially cited by Professor Elliot Smith) seem to have been in process of evolution in different places, though perhaps only brought to perfection in one of them. But was the commencement of megalithic construction an invention in the same sense as either of those? The first inhabitants, however uncivilised, of any stony country might surely begin to pile stones together to form dwellings, enclosures of any kind, and perhaps tombs; and they would, in the absence of mortar or cement, soon find that the larger were the stones, the better buildings they made, and, when they had overcome the difficulty of handling them, they would often use the largest they could get. This is surely a thing that might have occurred anywhere and many-where. When an efficient cementing material was introduced the use of small stones became much easier, though that of large stones in various forms was, and still is, retained. It might be safer to argue that the epoch-making discovery or invention made only in one centre was that of mortar or cement.

(2) Mr. Peet seems to construe the term megalithic rather strangely, but it is very difficult to draw a distinction, based only upon the size of the stones, between monuments of a similar appearance, and I therefore prefer the term "rude stone monuments," even though some of them are more or less worked. In my view it is building without mortar, with large or small stones, or a mixture of both, that is the distinctive phase of culture of which the special characters insisted upon by Mr. Peet are but local or tribal variations. Rude stone monuments are found in many and various parts of Europe, Asia, Africa, and America, and in Australia and the Pacific Islands—altogether too much ground to be covered by any one prehistoric race or by the influence, direct or indirect, of any such race. But, although rude stone monuments are found in so many different places, their characters differ and are often much localised. The great circles, the primary purpose of which was not sepulchral, are practically confined to the British Isles; there is nothing elsewhere that can be compared with Avebury, Arborlow, Stanton Drew, Stonehenge, Brogar, or with many of our smaller circles. If we turn to monuments which were unquestionably sepulchral, we find dolmens of various sorts by the hundred in Ireland, France, Algeria, India, &c., many in Wales, but practically none in the eastern half of England, except in one corner of Kent, where there are some

monuments of a Teutonic type, nor in Scotland, where circles take their place as sepulchres. But in the sepulchral circles there are also great local differences; those round Aberdeen are of one special type found nowhere else, except perhaps in one instance in Co. Cork; those round Inverness are of another special and quite different type, although they are so near; there are also numerous circles of what I may call the ordinary burial type in Scotland. (For details see my paper on "The Stone Circles of Scotland," in the *Journal* of the Anthropological Institute, Vol. 30, 1900.) In Yorkshire, again, there are no large non-sepulchral circles, but there have been many of the little barrow circles, and these are also found in parts of Siberia, where, however, they seem to be of a later date, as they contain articles of iron. All these differences seem to indicate that the inhabitants of each locality used large stones in different ways and for different purposes; in Scandinavia, for instance, circles, we are told, were used for fighting duels in, while in India small circles were places for sacrifices. Alignments were dealt with pretty fully from this point of view in my paper on "Megalithic Remains in the Neighbourhood of Antun, &c.," printed in the *Journal* of our Institute, Vol. 38, 1908; and I will here only mention the stone rows, so numerous on Dartmoor and practically non-existent elsewhere, as another local and probably tribal variety. The construction of a cist to put a corpse in is a thing that might occur to anyone in any place where stone was available, and larger chambers might easily be a development of the same idea. Dolmens, however, were discussed with regard to local differences at some length in my paper on "Some Dolmens of Peculiar Types in France and Elsewhere," printed in our *Journal*, Vol 40, 1910, to which, and to the other papers mentioned, I must refer readers for details, in view of the limits of space in MAN.

Colonel Forbes Leslie, sixty years or so ago, showed that there were many customs and beliefs common to the "Celtic Fringes" of our islands and to India, and that they were sometimes associated with the rude stone monuments; but is it certain that the people practising such customs are the descendants of those who reared the monuments, or that they did not, at one end of the line or the other, find the monuments already there, and take them over from an earlier population?

A. L. LEWIS.

Ægean Archæology.

Elliot Smith.

The Invention of Copper-making. By G. Elliot Smith.

My attention has just been called to a remarkable statement in Mr. H. R. Hall's *Ægean Archæology* with reference to Professor Reisner's view, "which gives 18
" to the Egyptians the credit for the invention of copper tools and weapons." The consideration that the true interpretation of the known facts is a matter of fundamental importance in reading aright the history of civilization is my excuse for returning to the discussion of evidence to which I have repeatedly called attention during the last five years.

From Mr. Hall's book (page 44) I make the following quotations:—

"But the source from which the early Egyptians obtained their copper can only have been—since the Black Sea coast seems too far away—besides the Sinaitic peninsula, Cyprus and the neighbouring coast of Syria. And the practical absence from the island of stone tools seems to show that the Cyprians used copper from the beginning, whereas the Egyptians passed through the Neolithic period before adopting copper. It is a natural conclusion that the Cyprians communicated the knowledge both to Egypt and to the Ægean, rather than that Egypt communicated it to both. The matter is arguable, but this seems the more probable theory of the two. The earliest Egyptian copper weapons are of the type characteristic of Cyprus."

It is difficult to know whether to be the more amazed at Mr. Hall's "evidence" or his logic—at his neglect of the fact, made known by the Egyptian Survey Department four years ago, that the copper mines in the Wady Alaqi, in Nubia, have been worked from the most ancient times (as in fact was previously assumed from the abundance of malachite found in the Predynastic graves in Nubia in 1907); or his inference that there was an export trade in copper, or rather copper ore (for the ore was known in Egypt long before the metal came into use), from Cyprus to the Thebaid and Nubia from the earliest Predynastic times.

Does Mr. Hall pretend that he has any evidence whatever to prove, or even to suggest, that Cyprus was the scene of copper-mining in such remote ages? Does he intend us to believe that the Cyprians never "passed through the Neolithic period" before adopting copper?

It seems to be a common delusion on the part of archaeologists that because copper ore was abundant in Cyprus it is natural to assume as a self-evident proposition the invention of copper-working there. One might with almost equal cogency, or the lack of it, argue that electricity must have been first discovered in the Baltic because amber is common there, or that the steam-engine must have been invented in New Zealand because there is plenty of natural hot water!

What such hypotheses fail to take into account is that in the case of every invention of which the history is known to us it was necessary for certain phenomena to recur time after time for years, or even centuries, before the mind of man was directed to them and was forced to realise the relationship between cause and effect; and even when this had happened, and something of the possible usefulness of the new knowledge had come to be appreciated, the full realisation of its practical application was acquired very gradually, and only after long experience and repeated experimentation.

The assumption that more than sixty centuries ago the first immigrants into Cyprus saw the copper ore, and instantly said to themselves, "Here is the raw material for making copper tools and weapons," is as ludicrous a travesty of logic as it is utterly opposed to all that we know of the history of inventions and of primitive mankind's mode of thought and action. For man had no instinctive knowledge either of the fact that copper could be obtained from the ore or of the usefulness of the metal when obtained.

What is necessary to help us to understand how such a discovery as the possibility of reducing copper ore came to be made is some circumstance which might have repeatedly, day by day, and year after year, called men's attention to the actual phenomena of the production of the metal from its ore. In Egypt there is not only the fact that the working of copper can be referred back to a period much more remote than that in which it is known to have been extracted anywhere else, but also before that time all the circumstances were provided daily to call the attention of the Proto-Egyptians to these simple metallurgical facts. For malachite was in use as one of the ingredients of a cosmetic from the earliest known Predynastic period, definitely anterior to the knowledge of the metal copper. For hundreds of years domestic accidents must have repeatedly occurred which led to the falling of some of this cosmetic into a charcoal fire; and no doubt after innumerable instances of reduction of the copper ore by such means had obtruded themselves upon the attention of these early Egyptians, some pre-eminent genius recognised the *rationale* of the means by which the metal could be obtained from the ore.

Archimedes is said to have recognised and utilised the force of the expansion of steam in 212 B.C. But just as it took nineteen and a half centuries, and the investigations of innumerable inventors, before James Watt brought this

knowledge to its full fruition in a really practical steam-engine, so also it took many centuries before the "James Watt" of metallurgical invention arose in Ancient Egypt to put this knowledge of copper to a really serviceable use and make tools and weapons of it.

Ancient Egypt has preserved all the essential stages of such a history. It provided the predisposing circumstances which made the initial stages of the invention possible. The use of copper can be referred back to a remoter age in Egypt than elsewhere. Until these claims to recognition as the home of the invention of copper-working have been disposed of or seriously questioned there is no other logical inference open but to regard Egypt as the place where the science of metallurgy had its birth.

G. ELLIOT SMITH.

REVIEWS.

Bibliography.

Piper.

Index to Periodicals: a Classified and Annotated Index to the Original Articles contained in the principal Weekly, Monthly, and Quarterly Periodicals. Compiled by various authorities and arranged by A. Cecil Piper, under the general editorship of Alexander J. Philip. Vol. 1, April to September 1914. London N.D. Published for the librarian and book world by Stanley Paul. xxxii+192. 25 cm.

19

It is difficult to criticise fairly a bibliography which sets out to index all current periodical literature, without regard to subject, character, or place of publication. This is the case with the volume under review. Even while making every allowance for a first issue, it must be pointed out that unless the list grows to an unmanageable size it is not likely to be of much use to the specialist in any subject. The entries under Prehistoric Anthropology, for instance, number eighteen only, and the list of periodicals dealing with anthropological or archaeological matters which have been catalogued is disappointingly small. The same applies to Geography, and still more strongly to other sciences. The Editor would probably be well advised to confine this index to periodicals of a general or semi-popular character, leaving the specialist publications to the scientific bibliographies. As these latter sometimes overlook important articles in the popular magazines and reviews, the list would still be of use to the specialist and of considerably enhanced value to the general reader, who does not want references to "heavy" literature, to which he can obtain access only with difficulty. So far as it goes, the list is accurate and very conveniently arranged.

E. N. F.

Folksong.

Kidson and Neal.

English Folk-song and Dance. By Frank Kidson and Mary Neal. Cambridge University Press, 1915, pp. vii + 178. 20 cm. Price 3s. net.

20

The two essays of which this little book is composed provide a popular introduction to the study of our native songs and dances. They are written in a clear style, with an avoidance, as far as possible, of highly technical detail. Both songs and dances are described, classified, and analysed, and the difficulties in their study which await solution, briefly indicated. Both writers speak with authority; Mr. Kidson, who deals with folksongs, is himself a compiler of a valuable collection from Yorkshire and Scotland; while Miss Neal has taken a prominent part in the revival of the folkdance.

The definition of a folksong followed by Mr. Kidson is "a song born of the 'people and used by the people'—a definition which, notwithstanding the fact that the folksong is so 'understood by the modern expert,' is far too loose, even with the qualification that "'the people' stands for a stratum of society where 'education of a literary kind is in a greater or lesser degree, absent.'" Their

traditional character, to which Mr. Kidson gives due emphasis, also ceases to be of much value when the study passes beyond the collecting stage. The essentially primitive element which undoubtedly survives in some English folksongs is absent from others, equally traditional in character, but representing modified versions of airs of an artistic, as opposed to a popular, origin.

Miss Neal, while describing briefly the chief dances still, or till recently, found in England among the peasantry, devotes most of her attention to the Morris dance. She follows Sir James Frazer in attributing it to a religious origin. The name she is inclined to derive from the Keltic "mor" (great), and "uasal" (noble and dignified). This would be fully in consonance with its supposed religious character. The derivation "morris" = *morisco*, i.e., "the Moorish dance," has been more commonly accepted, but whatever may be the origin of the name, the arguments which have been adduced to connect the dance with Morocco seem to be chiefly remarkable for their disregard of chronology.

Both essays are followed by an adequate bibliography and in the historical survey of the movements for the preservation of folksongs and dances full credit is given to the indefatigable labours of Mr. Cecil J. Sharp, to whom all who are interested in the traditional life and lore of this country are more than deeply indebted.

E. N. F.

China and India.

Laufer.

History of Defensive Armor: Being Part I of Chinese Clay Figures. By B. Laufer, Associate Curator of Asiatic Ethnology, Field Museum, Chicago. 1914. **21**

In this volume Dr. Laufer gives us another of his admirable studies, to which we have now grown accustomed to look forward, upon the rich ethnographical material from the Far East which is being accumulated in the Field Museum of Natural History at Chicago. The present work is based upon an extensive collection of ancient Chinese clay statuettes gathered from tombs in the provinces of Shen-si and Ho-nan; and as many of these plastic images are represented as clad in defensive armour possessing features throwing new light upon the history of that armour, we are indebted to Dr. Laufer for the present first attempt at a systematic history of defensive armour from the earliest period, a subject of much cultural interest, and shedding significant light upon the origin of Chinese civilization.

Our author treats this theme, needless to say, with great originality and thoroughness. The appearance of the earliest body-armour itself, coupled with archaic tradition ascribing the cuirass hides to two animals designated by the names *se* and *si*, and identified by most sinologists with one or two species of rhinoceros, leads to the unearthing of an interesting history of the rhinoceros embedded in literature, art, and mythology from Chinese sources. In this research, Dr. Laufer frequently has referred to the original texts at first hand, and sometimes differs from previous translators in his details. The mythology of this animal seems to explain the extensive use in China of rhinoceros-horn for anti-poison protective goblets, also the association of the rhinoceros with the world-wide myth of the unicorn.

The main subject properly begins with the second chapter, entitled "Defensive Armour of the Archaic Period." In the semi-historical Chou period (B.C. 1122-255), relying upon the statements in the *Rites of Chou*, Dr. Laufer finds that defensive armour was characterised by the absence of any metal, and consisted merely of a cuirass and helmet, both of rhinoceros hide; and from other sources he finds it recorded that metal armour and helmets were not introduced until the Tsin period (B.C. 255-206) and the Han (B.C. 206-A.D. 190), when iron armour and helmets came gradually into use. In the early period the hide-armour was of two kinds, a cuirass

in the form of a coat or corselet (*hia*), and scale-armour (*hiui*), composed of horizontal rows of imbricated pieces of leather cut in the form of scales. Of the former, his translation reads, "Those made from the hide of the two-horned rhinoceros (*si*) consist of seven layers of hide; those made from the hide of the single-horned rhinoceros (*se*) consist of six layers"—hitherto it had been supposed that the "seven" and "six" here denoted the number of pieces entering into the garment, and not the superposed layers. The helmets (*chou*) of this period were, he says, nothing but round leather caps, corresponding to the *galea* of the Romans. They were especially intended for use by charioteers. One of the motives in using the armour and helmet, it is suggested, was to create the impression of strength and bravery, and so to inspire fear in the enemy.

The introduction of metal armour into China in the third century B.C., forms the third chapter on the *Defensive Armour of the Han Period*; and in it Dr. Laufer discusses the reasons for this change in material. His theory, supported by evidence which seems in the main convincing, is that the Chinese derived their knowledge of metal armour from Persia through their perpetual predatory foes the Huns, who had adopted it, and thus forced the Chinese to use it in self-defence. The ancient pictures discovered by Stein in Turkestan show that metal was employed to re-inforce the hide-armour; and it is supposed that the metal first used was copper, which, by replacing the leather scales, gradually developed into the type of oblong rectangular "plate armour"; and eventually the copper was replaced by iron, which was the usual armour-metal in the T'ang period (A.D. 618-906).

"Chain-mail and Ring-mail" is also ascribed to Persia. These were extensively used by the Arabs and Moghals, and also by the Tibetans; the latter, however, are not credited with the possession of sufficient technical skill to manufacture the chain suits, which it is assumed they must have imported from the West, for Dr. Laufer cannot find that this type was ever employed by the Chinese. Certainly the results of local inquiry during the Lhasa Expedition of 1903-4 all tended to this conclusion as regards Tibet.

"Plate-armour" is the subject of the fifth chapter, and our author points out that it is not "sheet armour" or an arrangement of large sheets of metal enveloping the front and back of the warrior, but consists of horizontal rows of narrow rectangular plates mutually lashed together, and each row similarly fastened to the one next above and below it. This type Dr. Laufer is careful to distinguish from "scale-armour," for which a backing is necessary, and in his opinion these two types are of independent origin. The Scythians used bone-armour of this kind, and we think that the bone "sashes" used by Tibetan necromancers may possibly be a survival of this early type. Plate armour was widely diffused; it is found in Egypt in the period of Rameses II, through Assyria to Japan and N.W. America; and it is suggested that it was especially adapted for cavalry use.

"Sheet-"armour, so common in the mediæval west, comes into vogue for the first time in China in the T'ang period (A.D. 618-906) as the armour especially of the guardian deities; and this type originated, Dr. Laufer thinks, in the Sivaite worship of India. But we do not find the indigenous Sivaic gods of India delineated in this armour. "Horse-armour" forms the concluding chapter of the work; and in illustration are given numerous interesting model clay figures of armoured horses, with and without riders, dug up from the graves in question.

Well chosen and helpful illustrations profusely adorn the text and appendix; the sixty-four photographic plates are exceptionally well reproduced. Altogether Dr. Laufer in this monograph has made a substantial contribution to the advance of our scientific knowledge of defensive armour.

L. A. WADDELL.

Africa.

Meinhof.

An Introduction to the Study of African Languages. By Carl Meinhof. J. M. Dent and Sons, Ltd. 1915. 4s. 6d. net.

22

This book is a translation by Miss A. Werner of a series of lectures given by Professor Meinhof. In the first lecture the author shows the importance of the study of primitive languages, not only for their own sake, but also for the light that the study of a living tongue may throw upon a dead literary language. So greatly does the mode of life of a people affect their language that the Bedouin Arabs have retained a speech more primitive than the Hebrew of the Pentateuch. The second lecture is devoted to the material already collected from African sources; unfortunately the value as a book of reference of this extremely interesting work is much impaired by the absence of an index.

The third lecture deals with the importance of phonetics and the sound shiftings which have been worked out in the Bantu group, and discusses their causes.

Lecture Four, dealing with rhythm and accentuation, is particularly interesting. In Semitic, Hamitic, and Bantu languages stress accent is the rule, and thus presents no great difficulty to the European student, but the Sudanese group is monosyllabic and musical intonation takes the place of stress. The pitch of a monosyllable is a far deeper pitfall to the beginner than the reproduction of a click or the recognition of a "bilabial v." Though stress is characteristic of the Hamitic group and pitch of the Sudanese, these two great groups exist side by side, and it is only reasonable to expect to find both forms existing in some languages. This actually is the case in Duala and other Bantu languages. There seems now to be no doubt that tonic accent is the older form. The connection between tone and meaning is difficult to trace, but Professor Meinhof points out that "in Ewe certain onomatopoeic words are given the low tone if they refer to large objects, and the high if they denote small ones. . . . Similarly in telling fairy tales we usually speak of ogres in a deep, and of small animals in a high, voice."

In Lecture Five the author examines sentences from three typical African languages. The first, Ewe, a Sudanese language, is isolating; the second, Swahili, a Bantu language, has plural formation and class divisions with prefixes, and is agglutinative; the third, Somali, a Hamitic language, has case endings, personal pronouns, and grammatical gender, and is inflectional. The development of the inflectional from the agglutinative can be traced, but "the connecting link between the Hamitic and the Sudan languages is wanting. Probably what happened was this: a language resembling Ful and possessing in the main the characteristic Hamitic features already enumerated, assimilated a Sudan vocabulary and so formed the Bantu languages. Ful began to adopt, side by side with the classes, as they exist in Bantu, another system of classification, and made a distinction between persons and things, large and small objects. The old classification was, later on, gradually dropped; the personal class became the masculine gender, the thing-class the feminine, or, more strictly speaking, the neuter. This state of things is found to-day in all the Hamitic languages. . . . Probably the Hamitic languages when they first appeared in Africa, were about in the stage of development which we find in Ful."

Lecture Six deals with the influence of trade on languages, the practical importance of the study of African linguistics as a means of opening up the country, and as an auxiliary to other sciences. Here the author calls attention to the care that is required in taking down place names in order to prevent absurdities from appearing on maps, a necessary warning, since the writer has seen marked on a map Jebel Saket, as one might say a "blooming mountain"!

In the last lecture the connection between Hamitic and Semitic languages is

discussed, and their possible relation to the Aryan tongues. An interesting explanation of the otherwise puzzling use of the feminine numeral with a masculine noun, and the masculine numeral with a feminine noun, in Hebrew and Arabic, is offered by comparison with the phenomenon of "polarity" found in some Hamitic languages.

B. Z. S.

ANTHROPOLOGICAL NOTES.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL
INSTITUTE.

23

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The Magic of Jewels and Charms. G. F. Kunz. $9 \times 6\frac{3}{4}$. 405 pp. 90 Illustrations in Colour. J. B. Leppincott Co. 21s. net. (Publishers.)

Russian Folk Tales. Translated from the Russian. With an Introduction and Notes by Leonard A. Magnus. $8\frac{3}{4} \times 5\frac{1}{2}$. 350 pp. Kegan Paul, Trench, Trübner & Co. 7s. 6d. net. (Publishers.)

Prehistoric Man and His Story. A Sketch of the History of Mankind from the Earliest Times. By Professor G. F. Scott Elliot, M.A., B.Sc. $9 \times 5\frac{3}{4}$. 391 pp. 64 Illustrations and Diagrams. Seeley, Service & Co., Ltd. (Publishers.)

A Naturalist in Madagascar. A Record of over fifty years' intimate association with the natives and study of the animal and vegetable life of the island. By James Silree, F.R.G.S. $9 \times 5\frac{3}{4}$. 313 pp. With 52 Illustrations and 3 Maps. Seeley, Service & Co., Ltd. 16s. net. (Publishers.)

An Introduction to Social Psychology. By William McDougall, F.R.S. 9th Edition. 8×5 . 424 pp. Methuen & Co., Ltd. 5s. net. (Publishers.)

Human Leopards. An Account of the Trials of Human Leopards before the Special Commission Court, with a Note on Sierra Leone, Past and Present. By K. J. Beatty. 9×6 . 139 pp. 33 Illustrations. Hugh Rees, Ltd. 5s. net. (Publishers.)

Archæological Excavation. By J. P. Droop, M.A. $8\frac{3}{4} \times 5\frac{1}{2}$. 77 pp. 8 Diagrams. Cambridge University Press. 4s. net. (Publishers.)

The Festival Book of Salisbury. Published to Commemorate the Jubilee of the Museum, 1864-1914. $10\frac{1}{2} \times 7\frac{1}{4}$. 134 pp. Illustrated. 3s. (Museum Committee.)

A Select Bibliography of Publications on Foreign Colonisation—German, French, Italian, Dutch, Portuguese, Spanish, and Belgian. Contained in the Library of the Royal Colonial Institute. Compiled by Winifred C. Hill. $8\frac{1}{4} \times 5\frac{1}{2}$. 48 pp. 2s. 6d. (Royal Colonial Institute.)



FIG. 1.

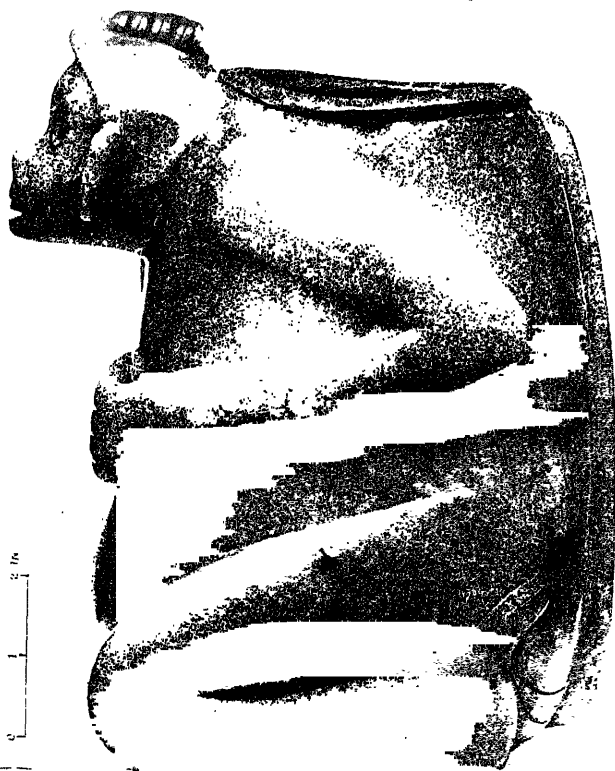


FIG. 2.



FIG. 3.

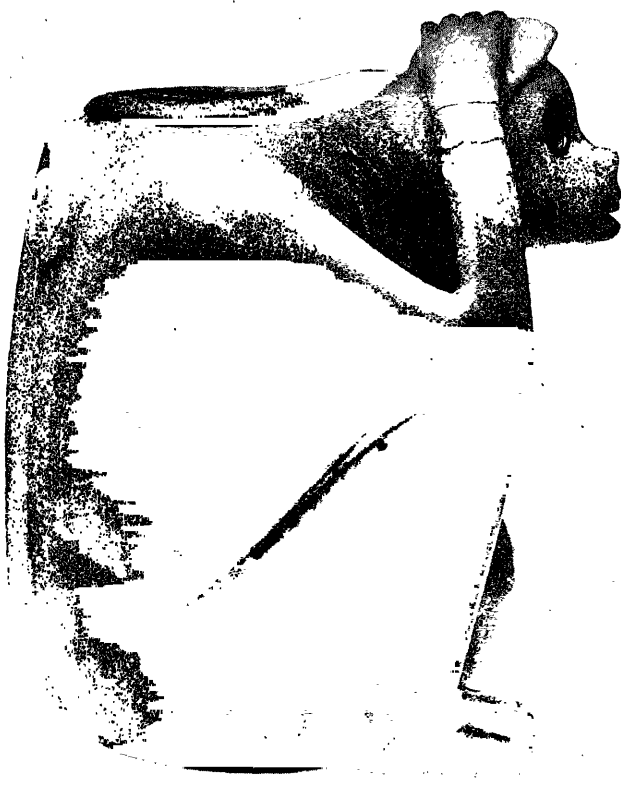


FIG. 4.

ORIGINAL ARTICLES.

Mexico: Archæology.

With Plate C.

Joyce.

Note on a fine Tecalli Vase of Ancient Mexican Manufacture.

By T. A. Joyce, M.A.

24

The accompanying Plate C illustrates a remarkable vase of translucent greenish-grey onyx marble (stalagmitic calcite) in the form of a monkey. The animal is represented as kneeling on the left knee, with the right leg flexed and supporting the elbow of the right arm. The right hand is placed palm downwards on the head, which is carved in very bold relief, and the left arm is bent so that the forearm is horizontal, pressed closely to the body. The left foot is carved in very low relief, and represented as grasping the buttock, the great toe or "thumb" being clearly indicated. Strangely enough, it is omitted in the case of the right foot. The tail extends up the back, and the tip is coiled in a graceful spiral. Bracelets are indicated on the wrists, and the eyes have been hollowed out, and were most probably originally inlaid with some other material. The interior of the vase has been carefully hollowed, the walls are thin, and the inner surfaces well finished. On the bottom alone can faint traces be seen of the tubular drill by means of which the cavity was made. The head, too, has been hollowed from underneath the chin, but the cavity has not been carefully finished on the interior, and traces of the drill are plainly visible. The exterior surface is well polished, and the whole vase is in practically perfect condition. At present the lip is sheathed with iron, which must have been added at a period considerably subsequent to the manufacture of the vase. Dimensions are: height, 243 mm.; greatest diameter from front to back, 210 mm.; greatest diameter from side to side, 163 mm.

The vase, which is in private possession, has no history beyond the fact that it was purchased in Seville some years ago. But it is obviously of Mexican origin, and dates from the days prior to the expedition of Cortés. It shows no trace of having been buried, and was probably brought back by one of the early visitors to the New World.

Several vases of this material, similar in character, are known to exist, notably two fine specimens in the British Museum, which were discovered in the Island of Sacrificios, off Vera Cruz. The Museum also possesses two other specimens of less perfect workmanship and of unknown locality, while three magnificent examples, also from Sacrificios, are preserved in the Mexican Museum. Of all these, the first two and the last three are figured in an article by Mrs. Nuttall, "The Island of Sacrificios," which appeared in the *American Anthropologist*, Vol. XII, p. 257.

The material from which these vases are carved was known to the ancient Mexicans as *tecalli*, but, strange to say, no mention of it is made by Sahagun in his chapter on methods of stone-cutting in pre-Columbian Mexico.* Its omission may be due to the fact that it is not a very hard material, and so was not considered worth special mention. Sahagun mentions the use of copper tubular drills for piercing and hollowing hard stones, and further states that sand and emery were used for polishing, bamboo (*otlatl*) being sometimes employed to give the finishing touches. In consideration of the fact that nearly all the known specimens, of which the *provenance* has been recorded, come from Sacrificios, it is perhaps fair to infer that these vases were the handiwork of Totonac craftsmen.

As regards the species of monkey represented by the vase under discussion, the prehensile tail and the peak-like growth of the hair on the forehead seem to indicate the spider monkey, one species of which (*Ateles geoffroyi*) is found in Vera

* See translation of the Nahuatl text by Professor E. Seler, in the *Compte-rendu de la VIII^{ème} Session du Congrès International des Americanistes*. Paris, 1890, p. 401, reprinted in the author's *Gesammelte Abhandlungen*, Vol. II, p. 620.

Cruz. The monkey (*ozomatli*) stood for the eleventh day-sign of the Mexican calendar, and, as figured in the Fejervary-Mayer* and other codices, corresponds very closely with the head carved on the vase. It is true that Seler identifies the Mexican *ozomatli* with the Howler (*Myctes*),† one specimen of which is also found in Vera Cruz, but I think that the evidence of the codices is against him.

However, the species of the monkey is a point of small importance compared with the interest attaching to the specimen, which is a fine example of a class of object rare in museums, and which provides good evidence of the skill attained by the lapidaries of ancient Mexico.

T. A. JOYCE.

Indonesia.

Perry.

Dr. H. O. Forbes and "The Orientation of the Dead in Indonesia."

By W. J. Perry.

25

In MAN, 1916, 3, Dr. Forbes takes exception to my paper on "The Orientation of the Dead in Indonesia."‡ He points out inaccuracies of detail; he disputes the evidence with regard to Timorlaut; and he is unable to accept the general conclusions of the paper.

The phrase "the Tenggereese of Bantam" was a slip on my part. The spelling "Badoej" was taken from Dr. J. J. Jacobs, de Badoej's.

Dr. Forbes objects to "Mr. Perry's 'Nusnitu'" as the name for the land of the dead in Timorlaut. Riedel says that the ghosts of the dead in Timorlaut go to Nusnitu, an island to the west of Seelu. This island is marked on his map, and also in the atlas of Stemfoort and ten Siethoff, as Nusnitu. Dr. Forbes gives in his book§ a map of Timorlaut "with corrections by Mr. H. O. Forbes"; on this map we find Nusnitu. This island is therefore not of "uncertain location," and Dr. Forbes is quarrelling with his own spelling.

Dr. Forbes considers that "in the interests of scientific accuracy . . . several of the statements which Mr. Perry relies on . . . require further corroboration." As far as I can gather, Dr. Forbes objects to Riedel as an authority: "The author, following Riedel. . . . Personal considerations tend to make me hesitate in accepting all Riedel's observations in Timor-laut. . . ." Riedel makes certain statements to which Dr. Forbes objects, i.e., that—

(1) The dead, when interred or placed on platforms, are oriented in an east-west direction.

(2) The notables are disposed of in a manner different from the commoners.

(3) Interment takes place on the island.

The evidence of Dr. Forbes concerning the disposal of the dead on the rocks on the sea shore is quite definite, for it shows that the dead in this case are not oriented in any given direction. Thus far Dr. Forbes is not at variance with Riedel, who makes no statement regarding the orientation of the dead when they are disposed of in this manner. But Dr. Forbes throws doubt upon the distinction between notables and commoners: "if the 'notables' can really be distinguished from the unimportant persons. . . . The coral pyramid with the fewest bodies and most room, would as a rule be chosen as the last resting-place of the most recent burial—both important and unimportant. . . ." Here he is at variance with Riedel, von Hovevell, Jacobsen, and van Doren, all of whom agree that platform disposal is the mode of disposal associated with the notables. But Dr. Forbes himself supports these writers, for he says, "As far as orientation goes, notables and commoners were treated alike, except that the corpses of the better class were usually encased in a canoe-coffin, often placed on a pile platform specially erected

* See my *Mexican Archaeology*, Fig. 7h, p. 60.

† *Zeitschrift für Ethnologie*, 1909, p. 210.

‡ *Journ. Roy. Anthr. Inst.*, Vol. XLIV.

§ *A Naturalist's Wanderings in the Eastern Archipelago*, 2nd Ed., p. 298. 1885. London.

"for it within, or in shallow water just beyond, the tide mark generally pointing seaward. Its compass-bearing would naturally vary with the sector of the circumference of the island on which it was erected."

As I read this paragraph, Dr. Forbes is telling us that "notables can really be distinguished from the unimportant persons," in that they are placed on a platform, in a canoe coffin, which is oriented out to sea. Both Riedel and von Hoevell state that canoe-coffins are oriented in an east-west direction; von Hoevell does not contradict Riedel so sharply as Dr. Forbes thinks, for his statement is general, whereas Riedel only tells us definitely about interments. But, leaving that matter on one side, it is evident that Dr. Forbes is contradicting not only Riedel but also von Hoevell. Dr. Forbes states that the canoe-coffins generally point seaward, and that the "compass-bearing" would vary with the sector of the island. A glance at the map shows at once that the vast majority of the villages of this group of islands are on the east or west coasts. As a general rule, therefore, canoe-coffins when pointing "seaward" will be east-west. Geographical considerations may, therefore, very well reconcile the statements of Dr. Forbes with those of the two Dutch authors.

Riedel states that medicine men and unimportant persons are interred in Timorlaut. Von Hoevell also states that interment is practised in this island as a less honourable mode of disposal. Dr. Forbes contradicts these two writers once again: "There was in Timor-laut practically no *interment*, as few places on the island presented more than a couple of inches or so of soil, accumulated upon a hard coral conglomerate floor. The excavation of a grave, consequently, presented almost insuperable difficulties to these natives, poorly provided with excavating tools."

"In the interests of scientific accuracy" I shall have to quote words which Dr. Forbes has written elsewhere concerning Timorlaut.* He says, "The bodies of those who die in war or by a violent death are buried, and not placed on rocks or on a platform, where only such as naturally die are deposited. . . ." Thus Dr. Forbes once again contradicts himself as well as other people.

Dr. Forbes does not find my general conclusions "very convincing," but he does not state why, except that "I failed to discover the beliefs that others seem to have found and recorded as existing. . . . So far as my small experience goes, the orientation of native houses in Java, Sumatra, Timor, Timor-laut, Buru, the Moluccas, and numerous districts in New Guinea, I detected no sure indications that their positions were not due purely to suitability of site."

I may perhaps be allowed to remark that few writers on Indonesia have paid any attention at all to orientation. For example, Volz was the first to detect the definite orientation of the Batta houses.† The material given in my paper represents a search through the great bulk of the literature of Indonesia, so Dr. Forbes's failure to detect any orientation may simply be due, as he suggests, to "lack of close enough research."

Dr. Forbes states that one would expect the orientation of the dead among the Baduwi, Kalang, and Tenggerese to be the same because they "belong to the same stock" and have similar "curious rites and customs." My main contention was that when the dead are oriented in some definite direction, this direction is that of the place whence the people in question have come or believe themselves to have come. Since the Baduwi, Kalang, and Tenggerese live in "isolated peculiar communities," it would hardly be supposed that they arrived at their present habitats from the same direction and in similar circumstances. Therefore one could not expect similar directions of orientation.

W. J. PERRY.

* *Op. cit.*, p. 324. † *Nord Sumatra*. Vol. I. Die Batakländer. Berlin, 1909, Chap. IX, *et. seq.*

San Diego : Physical Anthropology.

Breton.

Physical Anthropology at San Diego. *By A. C. Breton.*

26

The Panama-California Exposition at Dan Diego, Southern California, during 1915, has been notable for the exhibit entitled Science of Man, prepared and arranged by Dr. A. Hrdlička, of the Division of Physical Anthropology, United States National Museum, Washington. Extracts from the descriptive catalogue will give some idea of its value.

In order to present the whole subject in a popular and educational form it was divided into four sections : (1) Man's Evolution ; (2) Development and Growth ; (3) Variation ; (4) Decline and Elimination. To these it seemed necessary to add a subdivision dealing with modern anthropological methods, including a comprehensive library. The five sections were placed in a special building of five halls, and the contents were as far as possible originals and of permanent museum value, to serve, if circumstances permitted, as a nucleus or an important part of a future anthropological museum on the Pacific Coast. This has now been decided, and a strong local committee formed to carry on a permanent museum there.

For three years Dr. Hrdlička was engaged in expeditions to acquire the necessary material, visiting European museums and the sites where remains of early man had been found, and making trips to North-East Asia and to Peru. Field work was also done by J. Matiegka, of the University of Prague, on neolithic and later prehistoric man in Central Europe, and by K. Stolyhwo, head of the Anthropological Institute, Warsaw, on ancient men in south-west Russia and in the Yenisei Valley, Siberia. Dr. V. Schuck, of Prague, spent fourteen months in South Africa among the Zulu and Bushmen, but when the war broke out was forced to leave the country. Other collaborators made a comparative study of child growth among primitive tribes.

The results of all this preliminary work were arranged as follows :—

The first hall, devoted to Man's Evolution, contained accurate casts of the most important authentic remains of early man, with photographs and coloured charts of the localities where they were discovered. Busts modelled by M. Maseré under M. A. Rutot's direction, formed probable representations of the original beings. The palæolithic paintings and sculptures in caves in France and Spain were fully illustrated from Abbé Breuil's copies. There were also geological and stratigraphic charts relating to man's evolution and to the possible lines of ascent, after the foremost authorities. Crania of the existing primates, showing a progression of forms from the lemur to man, while not representing the line of man's evolution, illustrated in something like ascending biological order the species that now connect him with the rest of the animal kingdom.

The second hall, devoted to Man's Development, contained a series of busts made at the National Museum to show the white American (of at least three generations in America on each parental side), the full blood American negro, and the Indian. Fifteen male and fifteen female busts composed each set, made from casts taken on the living subject except in the case of new-born infants, who were modelled, and carefully corrected from the sitters. Thus, at certain periods from infancy to old age (the oldest a negress of 114) the stages could be compared. The whites and negroes were obtained, with few exceptions, in Washington and the vicinity, though born in various parts of the eastern and southern States ; beyond health, pedigree, and the requisite age, there was no discrimination of choice. For the Indian the Sioux were chosen as in great measure still of pure blood and characteristic ; determination of their age was also feasible.

Development of the brain was shown by casts, and that of the skull, lower jaw, and the more important bones, by original specimens. Charts provided data relating to normal senility and to the growth of the child.

In the *third hall* the racial, sexual, and individual variations of the white, yellow-brown, and black races were exhibited. Male and female busts in pairs, made from facial casts, included the typical Indian, Eskimo, Formosan, Malay, Mongolian, and Maori, for the yellow-brown peoples; and for the blacks the Zulu, Bushman, African Pygmy, Philippine Negrito, and Australian. Racial variation was further illustrated by 200 portrait transparencies and by charts of classification, distribution, and statistics. For individual variation there were 106 facial casts, chiefly of Eskimo, Bushmen, Zulu, and several tribes of Indians. Of special interest were plaques giving variation of individual bones, and particularly the cross-sections of the long bones, representing selections from many hundred skeletons of whites; the variations in each bone are divisible into a number of distinct groups, of racial and other significance.

Sets of skulls and facial parts represented dolicho-mesati- and brachy-cephaly, microseme and megaseme orbits, leptorhine and platyrrhine noses, and the three main types of shape of the vault, the pentagonal, elliptic, and rounded.

Sexual variation was exemplified in a series of sets of Indian bones. Dr. Hrdlička states that the difference between male and female in the whites is the same.

A number of artificially deformed native American crania were of great interest, some being simple cradleboard deformation, common among the Navaho and Pueblos—various grades and forms of flattening of the occiput due to long-continued pressure of the infant's head against a resistant head cushion. Intentional deformation in two main varieties, "flathead" and Aymara, was produced in the former by pressure from a plank or from one or two pads, and in the latter by a band applied round the head of a new-born infant.

In the *fourth hall* were set forth the causes, outside of normal senility, that contribute to the decline of the human organism and usually cause death. The geographical distribution of the principal diseases, and the mortality from them, were displayed in coloured charts and maps. The main exhibit here consisted of a large and unique series of the remains of ancient Peruvians, giving almost their entire pathology. These were fruits of the examination by Dr. Hrdlička in 1912-13 of nearly 5,000 burials along the coast and in the mountains of Peru.*

Sixty trephined crania from burial caves in western mountains afford examples of surgical skill. In many cases the operations were successful, as shown by the absence of signs of infection and the growth of normal bone in and about the wound; in other instances the edges appear clear-cut and show little or no sign of healing. Stone, obsidian, or copper knives were used, and the bone was scraped, cut, sawed, or drilled (very rare), or by combination of these methods. No part of the skull was considered too dangerous for an operation; on some skulls there are remains of two or more, made at different times. When the hole was very large and the brain tended to protrude, a stopping plate of gourd, shell, or occasionally silver, was used. To deaden the pain, the patient probably chewed coca leaves.

Five mummies, also from the mountains, had been treated merely by drying, through the action of the air. Dr. Hrdlička states that artificial preparation has not thus far been found in Peru nor in any other part of America, but he does not say how the bodies were preserved in the excessive humidity of the coast, where for many months, as at Lima, almost everything becomes covered with mould.

* For a detailed report see "Anthropological Work in Peru in 1913, with Notes on the Pathology of the Ancient Peruvians," *Smithsonian Misc. Coll.*, Vol. 61, No. 18, Washington, 1914.

The Anthropological Laboratory, in *the fifth hall*, was designed to be a model, with a special library including full sets of periodicals now seldom found complete; an ample modern instrumentarium with machines for mathematical computation; suitable metal cases for bibliographical cards, for the card catalogue and for maps and photographs. There were portraits of twelve of the founders of physical anthropology, specially fitted rooms for photography and plaster work, and a practical anthropometric outfit.

It will be seen from the foregoing that no pains have been spared to make a comparative collection that will be of great value to the ethnologist as well as to the general public, although Dr. Hrdlička has proceeded on the assumption that the races in America have been introduced from the Old World in comparatively recent times. That there have been movements both ways is evident, and the consequent complexity of the problem of origin makes much further research necessary before it can be solved. The placing of available data together should help towards this, and may lead to results unexpected by the Washington School.

A. C. BRETON.

Archæology.

Christy.

On a Strange Stone Object from a Bronze-Age Interment in **27** Essex. By Miller Christy.

The highly-remarkable object of sandstone represented by the accompanying photograph belongs to the Trustees of the Museum at Saffron Walden, by whose permission I was enabled to exhibit it at our meeting on 2nd November last. It was dug, some years ago, from an interment of the Bronze Age in that vicinity, and there have been many very-discordant speculations as to its possible nature and use; yet none of them has thrown any light upon it. So far as I have been able to ascertain, no similar object is known to exist. At all events, none such appears to have been described or figured. For the following facts as to its discovery, I am indebted to my friend Mr. Guy Maynard, the curator of the museum mentioned.

In the autumn of 1902, Mr. Martin C. Robinson, of Trout Hall, Wendens-Ambo, near Saffron Walden, brought to the museum there some fragments of rough hand-made pottery which had been dug up by gravel-diggers in his employ. These fragments Mr. Maynard recognised at once as parts of a Bronze-Age burial-urn of the well-known "shouldered" type, originally 11 inches or 12 inches high. The fragments are still in the museum.

On visiting the site of the discovery, Mr. Maynard found it to be situated in a field lying just within the northern boundary of the parish of Newport and close to a small stream which flows into the River Cam, on its western side, near Wendens Mill. The field is bounded on the east by the main road from London to Cambridge and Newmarket; on the west by the Cambridge main line of the Great Eastern Railway; and on the north by a hedge which marks also the boundary between the parishes of Newport and Wendens-Ambo. The exact position of the urn in the field was about 50 yards west from the road and a little less from the hedge bounding the field on the north. The chalky post-glacial gravel which masks the lower slopes of the valley here approaches the river in a well-marked terrace, now much defaced by gravel-diggings; and the interment was placed well down the slope, towards the shoulder or edge of the terrace, at a level just below the 200-feet contour-line.

The urn had been inserted in a shallow cavity dug in the top-soil, its base being no more than about 16 inches below the surface. On digging round the hole in which it had lain, Mr. Maynard made a curious discovery. After removing the soil with which the cavity around the urn had been filled (this filling-in being easily distinguishable from the surrounding undisturbed soil by the charcoal and burnt flints included in it), Mr. Maynard found, actually in this filled-in material and at

about the level of the base of the urn—in fact, almost under it—a small fragment of very hard black pottery, which proved, on examination, to be black basalt-ware and probably part of a teapot of late-eighteenth century or early-nineteenth century manufacture. Yet there was no indication whatever that the urn had been disturbed prior to the time when the gravel-diggers had shattered it. Indeed, when Mr. Maynard visited the spot, the impress of the base and side of the urn was still quite obvious in the filling of earth, charcoal, and small stones. The only conclusion Mr. Maynard could come to was that the working of a rabbit or some other burrowing animal had caused this fragment of modern pottery to become associated with the much-earlier interment, though no trace of any burrow was perceptible at the time of his visit.

The discovery above described is, no doubt, of little importance in itself; but Mr. Maynard desires it to be recorded, in view of a later discovery on the spot, and because Professor Haverfield advises him that it is worth noting as an example of what is possible in connection with the mechanical admixture of buried antiquities of very different dates.

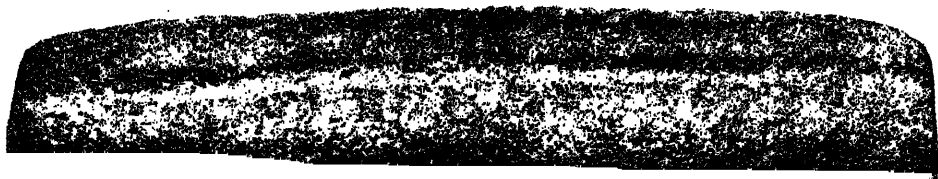


FIG. 1.

By the kindness of Mr. Robinson, the gravel-diggers were instructed to report any further discoveries they might make at the same spot. Accordingly, in 1904, Mr. Maynard received the remarkable stone object herein described and figured (Fig. 1). It was stated to him that this had been found buried with, and *actually touching*, the side of another “rough red pot,” which closely resembles, in make and in general outline, the example described above. Mr. Maynard questioned closely the actual discoverers, whom he knew to be trustworthy; he secured the fragments of this second urn; and he states without hesitation that there is no reason to doubt that the stone object had really been buried in the same hole with the urn, and at the same time: that is to say, it was in true (not merely in accidental) association with the burial. Mr. Maynard is very far from being an amateur in such matters, and I rely with confidence upon his judgment. Fragments of this second urn are also in the museum.

The stone object in question is fashioned from a block of rather coarse reddish sandstone. Blocks of this stone, of varying sizes, are obtainable in abundance, in the form of “erratic” boulders, from the gravels of the immediate vicinity. It is roughly cylindrical in shape, having sides which are nearly straight, though tapering very slightly towards each end, and curving sharply inwards within half-an-

inch or so of each end. The actual ends are flat, or as nearly so as the natural cleavage of the stone allows. One end is shown (Fig. 2). They are, indeed, flat enough to permit of the object being stood upright on either end, though insecurely, owing to the contracted area. Quite clearly, however, the object was not intended to be so stood. On the whole, it is symmetrical in shape, though by no means absolutely so. Its length is about 189 mm.; its diameter is about 63 mm.; its circumference (at its middle) is about 201 mm.; and its weight is about 1,165 grammes.

Undoubtedly the most striking feature presented by the object is the fact that its sides are traversed longitudinally by five shallow, narrow, round-bottomed, equidistant grooves, which divide its transverse section into five approximately-equal rounded lobes (Fig. 3). These grooves were intended evidently to be both straight and parallel with one another; and, on the whole, they are so, though two of them are diverted slightly to one side near one end. There is nothing to show whether the grooves were cut by means of a stone tool or a metal tool; but, in view of the narrowness of the bottoms of the grooves, a metal tool seems the more probable. One thing noticeable about these grooves is that they are equally deep throughout their lengths, thus accommodating themselves to the slight taper of the object itself towards each end. This suggests that the taper is original and intentional, and not the result of wearing down due to usage.

The size and outline of the object, and the five longitudinal grooves down its sides, give it, in its general shape, a surprising resemblance to a corn-cob. Professor Flinders Petrie has suggested the very-appropriate term "pentacrinite" to describe its shape.

One question which naturally arises is: Did this stone pass through the fire which consumed the body of its presumed owner? That it did so seems inherently probable, but there are no means of proving whether

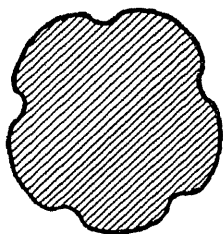


FIG. 2.

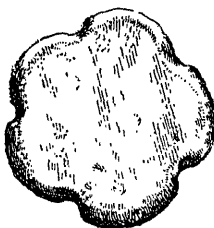


FIG. 3.

it did or not. The slightly-reddish colour of the sandstone makes it look, at first sight, as though it had been burned; but Dr. H. H. Thomas, petrologist to the Ordnance Survey, who has kindly given me his opinion on the point, states that the stone itself affords no definite evidence whether it has been through the fire or not. On the whole, however, he thinks it has not been.

Another question which inevitably arises is: For what domestic, economic, or other use could this apparently-unique object have been made? And, if of no such use, for what was it fashioned?

The stone itself or drawings of it have been shown to a large number of archaeological authorities in this country, including many of the highest standing. Yet not one has ventured to pronounce a definite opinion in regard to its use. Mr. Maynard has also searched museums and private collections without being able to find anything of a similar nature. Among the many suggestions that have been made as to its use, most have been totally wide of the mark; as, for instance, that it was a net-sinker or a loom-weight. That it was not a pounder or a muller of any kind is certain; for its ends are not in the least abraded. That it was not a corn-grinder is equally certain; for its sides show no sign of being worn down by friction. That it was not an arrow-sharpener or a stone for polishing flint and other implements is also certain; for its grooves show no signs of having been used for any such purpose. Moreover, the object as a whole bears no resemblance to the large *polissoirs* of which one sees so many fine examples in Central France. Smaller hand polishing-stones, having one or two grooves worn in them, have been found not uncommonly,

especially in Denmark and in Scotland; but these bear no resemblance to this "pentacrinite" stone, evidently fashioned with some object, and having five symmetrical grooves cut (not worn) in it.

Mr. J. Edge-Partington has suggested to me that, lashed on to the end of a wooden handle (the lashings passing over one end and down the five grooves), it might have formed the head of a club. He has pointed out also that in the British Museum there is such a club, brought from Hawaii by Vancouver's Expedition of 1790-95.* In this case, however, the club-head, which is of basalt, is more or less pyriform, and has four longitudinal grooves only, these grooves being continued over the end, causing it to become four-cusped. Yet Mr. Edge-Partington agrees with me in doubting whether this sandstone object from Newport was intended, in fact, for use as a club-head.

The only really-practical suggestion I have heard advanced as to its possible use is that it was designed as a roller, to be rolled forward and backward beneath the palms of the open hands, for the purpose of breaking or "braying" flax, laid on some flat surface. It seems probable that it would serve that purpose effectually. Moreover, it is certain that the Bronze-Age people were accustomed to spin and weave the fibre of flax or other fibre-producing plants.† Yet, even so, it is not clear why such an object should have been buried with its owner, unless we suppose that he or she was a spinner or weaver of flax.

Altogether, therefore, the practical use (if any) of the object remains a mystery. Even if, in our doubt, we conclude that it is some modern object which has been introduced by the burrowing of rabbits into a genuine Bronze-Age interment, like the fragment of a modern teapot (though how any object of the size and weight could be so introduced is not clear), we are still no nearer a solution; for no modern implement of the kind is known.

On the whole, it seems more reasonable to conclude that the object really is of the Bronze Age, as it seems to be, and that it has some religious or ceremonial significance. To this conveniently-vague conclusion one often has to come in such cases. It does, at least, go some way to explain why the object should have been buried with its owner.

This is, moreover, not the first time that mysterious objects, undoubtedly of some religious or ceremonial significance, have been found in interments of the Bronze Age in Britain. Among the most remarkable things of the kind are the three unique cylinders or "drums" of chalk, engraved on their sides with geometric patterns and with conventional representations of the human face, which were found by Canon Greenwell in the grave of a child, in a barrow of the Bronze Age, at Folkton, in the East Riding of Yorkshire, in 1893,‡ and now in the British Museum. These chalk "drums" can only be regarded as having been idols or objects of worship. There can hardly be a doubt that the designs engraved upon them are due to influences coming from the Eastern Mediterranean; for more or less similar designs are found engraved on neolithic and Bronze-Age objects discovered in that region.§

In this connection, it is noteworthy that when I first showed this stone object from Newport to Mr. Reginald Smith, he said at once, "Why, its shape reminds one of that of the Egyptian pillar, derived from the bud of the lotus." A reference to Sir Arthur J. Evans' work on the subject|| certainly confirms the resemblance,

* Figured in *Journ. Anthr. Inst.*, xxi, p. 104 and Fig. 3, Pl. x (1892).

† See, *inter alia*, Evans, *Anc. Stone Implements*, 2nd Ed., pp. 436-437 (1897), and Laver, *Trans. Essex Arch. Soc.*, n.s., xi, pp. 219-222 (1911).

‡ *Archæologia*, lli, pp. 14 and 23 and Plates 1 and 2 (1890).

§ See *Brit. Mus. Guide to Antiquities of the Bronze Age*, pp. 89-91 (1904).

|| *Mycenæan Tree and Pillar Cult*, pp. 40-48 (1901).

except that the stone object tapers uniformly, though slightly, towards both ends, whereas the two ends of the Egyptian pillar were not symmetrical in their taper.

Probably, then, we shall be right in concluding that our "pentacrinite" stone was an idol or a sacred object of veneration. MILLER CHRISTY.

Polynesia: Linguistics.

Hocart.

A Samoan Sound Change. By A. M. Hocart.

28

The sound change I propose to study here is well known to all Samoan scholars, yet its theoretic importance, which is of the first order, has been entirely overlooked. It raises no less a question than that whether ethnological changes are gradual or sudden.

Pratt in his preface to his Samoan Grammar, dated 1876, writes: "Some Polynesian tribes have recently changed the pronunciation of one or two consonants. . . . In Hawai'i they have changed the *t* into *k* and *ng* into *n*. Thus *tangata* has become *kanaka*. Samoans are doing the same, to the great injury of the language."

This is not quite accurate, for Samoans have changed *n* into *ng*, not *ng* into *n*, like the Hawai'ians; *tangata* is now *hangaka*, *teine* is *keinge*.

Pratt had here a splendid opportunity of studying a sound change in actual life. He could have traced it to its origin, whether an individual, or a single village, or a whole district; he might have determined whether the change was wilful or spontaneous, and if wilful what were the reasons for it. He could thus have substituted facts for the existing hypotheses. He missed the chance of a lifetime.

One thing we should have been most grateful to know is, whether the change was sudden or gradual. For so far the only theory appears to be that no child can reproduce exactly the sounds he hears from his elders; the deviations may each be so small as not to be noticeable, but in the course of generations they total up as big changes.* This theory does not explain why these individual deviations all tend in the same direction, for if one individual deviates in one direction, and another deviates in the opposite one, they will antagonise one another, and in the end the sound will be exactly the average same as before.

Now it is evident that this change, if not sudden, has been rapid enough to be noticed, or Pratt would have hardly been aware of it. Hardly more than a generation had elapsed in 1876 since the missionaries first visited the islands, at which time the *t* was in use. If white men perceived it the Samoans must have been quite conscious of it.

A stronger proof of the suddenness of the change is that the old pronunciation is still retained in sermons, under missionary influence, and in songs, apparently of their own free will; moreover, a Samoan will often use his *t*'s and *n*'s if he thinks the white man cannot understand him otherwise. This disposes at once of the theory of slight deviations, for, according to that theory, each man would believe that he was pronouncing exactly like his elders in sermons, songs, and colloquial speech, and he could not retain the old pronunciation simply because he would not notice that he is departing from it.

We do not know whether the change began in Upolu, or Tutu'ila, or Manu'a. In Savai'i it is quite recent, so recent that I was assured that the *t* was preserved in the greater part of the island. When I got there, however, I found it the same as in Upolu, except that a few here and there stuck to their *t*'s and *n*'s. A trader in Sala'ilua told me he remembered the change coming in about 1902-3. As men of fifty now use the new style, it follows that they must have suddenly changed their pronunciation at the age of forty.

* Cp. E. Sapir, *History and Variety of Human Speech*, p. 582 (Smithsonian Report).

The possibility is not entirely excluded that the change may have developed unnoticed in some village, and that only its spread to other parts has been sudden. But this is extremely unlikely in view of the continual intercourse and intermarriage between villages in Samoa.

One does not meet with any transition between the old and the new. It is always definitely *t* and *n*, or *k* and *ng*. Though, no doubt, to a Samoan the change is natural and easy, it is enough to make a European lose his bearings.

It should be noted that both changes go hand in hand. One does not hear *keine* or *teinge*; it is either *keinge* or *teine*.* It appears, therefore, that it is not by accident that the two changes have occurred at the same time, but that they are two manifestations of the same tendency.

Though a Samoan appears to have no difficulty in pronouncing all *t*'s or all *k*'s, he seems unable to intermingle the two. Thus a cook is *kuka*, cocoa is *koko*, but if the man be following the old style he will say *tuta*, *toto*, although he has never heard these forms from a European. My name was rather a stumbling-block to them; they could say *Okaki* or *Otati*, but *Okati*, my own way, was beyond them.

One important consequence of sudden changes is considerably to shorten the time required for the phonetic transformation of a language. It often happens that a certain sound will change into another, then the cause which led to this change ceases, and if the first sound for some reason reappears it will not again be changed. Thus Tongans changed *s* into *h*; after the cause of the change ceased to operate *ti* was changed into *si*; thus *s* reappeared in the language and has remained. If sudden changes are admitted the interval between the disappearance of *s* and its reappearance may have been much shorter than we otherwise would have to assume.

I hope I have sufficiently shown what interest centres round a seemingly unimportant sound change. Unfortunately, we are for the most part so absorbed in the fossils of the past that we have no eyes for the living present which alone can explain the fossils. No one would dream of setting up as a palaeontologist who had not a thorough knowledge of contemporary fauna; but we ethnologists overlook, some even despise, what is going on under our very eyes, and think that alone is worth studying which is ancient. While long Samoan pedigrees, which are nothing but names, and countless tales which add nothing to our knowledge are collected, a little sound change, which could be traced from its beginning to its end, is thought no more worth than an inaccurate mention. It is an attitude which at present is natural, and which even one conscious of its error finds hard to get rid of, but we must get rid of it, for if we cannot understand contemporary changes of which all the data are available, how can we expect to explain the remote developments of antiquity?

A. M. HOCART.

Australia.

Seligman.

An Australian Bible Story. By Professor Seligman, M.D.

29

The following story was obtained in 1908 from members of the Otati tribe whose territory was in the neighbourhood of Cape Granville, on the east of the Cape York Peninsula. Even then the tribe was in a state of disintegration and it is unlikely that it still exists. The interest of the story is that while it is clearly founded on the Biblical account of the fall, my informants had no idea that it was not their own. Moreover, although the tribe had come into fairly intimate contact with white men, I believe I am justified in saying that there had been no direct missionary influence. The purpose of the story was to explain the difference in colour of black and white men.

* Even children do not mix up the two. They are, however, apt to draw false inferences. Thus, *fungono* has now become *fangongo*. A little girl first trying to speak in the old way made it *funono*, thinking the first *ng* also represented an *n*.

Long ago all men were white; they lived in houses and food was abundant and easily obtained. Their chief was wise and powerful, and told them what was good to eat, and what to avoid. One fruit, a berry growing in clusters and called *unmoi*, he particularly told them not to touch. One day some men and women saw this fruit and said, "Why should the chief prevent our eating this; it looks good, let us try it; he will never know we have eaten it." So they plucked some and ate it and found its taste good. But a man saw them and went to the chief saying, "Look at those people; they have plucked and eaten *unmoi*." Then the chief got very angry and calling the culprits said, "You bad men, did I not give you plenty of good fruit to eat, was there not plenty of white fruit and green fruit growing on the trees? Now because you have not obeyed me but have eaten black fruit (*unmoi* = black) you and your children shall have black skins; you shall have no more houses and no more clothes, you shall walk about naked and you shall have hard work to find your food, which, since you like dirty food, you shall find in the ground. But I and the people who have obeyed me will go to another place." (This place is pointed out as being in the bush in the far west where sun goes down through a great hole in the ground.) This is the reason why all "mainland" people are black.

C. G. SELIGMAN.

REVIEWS.

Malay.

Gimlette.

Malay Poisons and Charm Cures. By J. D. Gimlette, M.R.C.S., L.R.C.P. **30**
 London: J. and A. Churchill. 1915. 3s. 6d. net.

This brief and unpretentious little treatise, by a highly competent medical man, who has had eighteen years of experience of medical work in tropical Malaya, is packed from end to end with information of supreme value with regard to the *materia medica* of the native medicine men, and their use of poisons in particular. It is actually a first-hand record of experience gained in dealing with, and of information gained by personal research into, what is undoubtedly the most difficult side of a doctor's work in the tropics. It is, therefore, a novel and a highly original and important contribution to the great and growing subject of Tropical Medicine, and we would strongly urge all University Departments and doctors who are occupied in such research, whether at home or in tropical countries, to provide themselves with a copy. They will find few volumes of such slender proportions so well worth their weight in hard money. Incidentally, the book is not only of vital importance in respect of the information it affords with regard to the nature, effects, and methods of employment of a startlingly large number of poisons, but by letting light in on the dark places it exposes many of the secrets of the native witch-doctor. For this reason it naturally also becomes a book to be consulted in the numerous obscure cases of secret poisoning, of which, as in many parts of Africa, so terribly large a percentage still baffles all efforts of the law to bring the offenders to justice. The Malay women, before the establishment of our several Malay protectorates, had an unenviable reputation as expert poisoners, and of their methods Dr. Gimlette gives us a number of examples. In 1913, he says, a girl patient in Kelantan (one of our new East Coast Malay States) brought him a scrap of newspaper containing the short fine hairs of a bamboo (*miang rëbong*, a well-known native irritant poison) mixed with fine particles of powdered glass! She said that another Kelantan woman, her fellow-wife, had recommended it as a reliable medicine for a cold, but *as they were jealous of one another, she sought another opinion!* Elsewhere we have examples of the use of *tuba* (i.e., *Derris elliptica*, Berth.) as an abortifacient, as a means of poisoning wells, and as used (by Dayak girls) for committing suicide. Elsewhere, again, we read of the poisonous vapours and

exhalations produced by the Malay thief for stupefying his victims, the prototype of the poisoned gas now regrettably employed in warfare. *Datura* is used for this purpose, being burnt below the floor of the usual Malay pile-dwelling; the smoke is conveyed to the rooms above by a bamboo pipe; even heavy boxes can then be moved without any fear of waking the victim. Even more remarkable are the alleged cases of deferred poisoning (p. 17), where we read that the death of a victim can be timed within three months, six months, or three years. But the list of the animals and plants and inorganic objects that are used by the Malay poisoner is appallingly long and complete, and we must recommend our readers themselves to study the pages of this most important and arresting little volume. W. W. SKEAT.

Archæology.

Bushe-Fox—Hill—Gowland.

Excavations at Hengistbury Head, Hampshire. By J. P. Bushe-Fox, with appendixes by G. F. Hill and W. Gowland (Reports of the Research Committee of the London Society of Antiquaries, Oxford, 1915). Pp. 84, with 35 plates and 27 text-illustrations. 31

The low headland of Hengistbury faces the Channel a little west of the Solent and a little east of Bournemouth, sheltering from sea and wind the lagoon called Christ Church Harbour. It has nothing to do with Hengist; its name, in its present form, seems to be an antiquary's fiction. But the signs of ancient settlement are plain upon it, and when, in 1911, the builder threatened, the London Society of Antiquaries wisely set about to explore it betimes. The work was committed to Mr. J. P. Bushe-Fox, who had dug in Egypt under Flinders Petrie and shared in the Corbridge excavations, and has since been entrusted with the uncovering of Wroxeter. In six months he trenched with real skill and success a substantial part of the site, an expanse of 42 acres lying between the headland proper and the harbour, brought to light much débris of wattle and dab huts, clay and stone floors, ovens, "hearths," and other vestiges of a prehistoric settlement, and recovered from among them a mass of potsherds of many dates and types, several thousand British and about 100 Roman coins, and a few, somewhat surprisingly few, other small objects—four fibulæ, two mirror-handles, one clay sling-bullet, and so forth. He also examined certain ramparts and round barrows which had long been visible. Now his Report is before us, admirably printed, lavishly illustrated, and supplying an excellent archæological *compte-rendu* of the work, brief, business-like, full of condensed detail, and, while clearly meant for reference rather than reading, sure to be an invaluable book of reference. Mr. Bushe-Fox himself supplies the general account of the finds and describes the pottery; this, though burrowing rabbits have wrecked its strata and associations, he has been able to list minutely, to classify provisionally to date roughly and to reinforce by parallels from other British and foreign sites. Mr. G. F. Hill adds an entirely excellent account of the coins, and Professor Gowland treats some noteworthy remains of metal-working. We can now attempt a provisional history of Hengistbury.

The site beside Christchurch Harbour was occupied by man from neolithic till late Roman days, not perhaps continuously but with few interruptions. Of the earliest inhabitation in the Ages of Stone and Bronze we know little; maybe there is little to know. Definite settlement becomes traceable in the Iron Age. Unfortunately, the date of its birth is not clear. Mr. Bushe-Fox assigns it to the Early Iron Age (the Hallstatt period), vestiges of which are otherwise rare in our islands. He points out that the potsherds of his Class A, which he thinks the earliest on the site, correspond to potsherds found in certain cemeteries of south-west France which show the Hallstatt civilisation: accordingly, he places Class A before B.C. 400, or even 500. He omits, however, to take into account the fact that these cemeteries,

Avezac-Prat and the rest, are generally and reasonably regarded as later than the ordinary Hallstatt period. They occur in a land where remains of the next part of the Iron Age (La Tène I and II) are wanting, and they apparently fill the gap; they have even been ascribed to about 100 B.C., and though this estimate is probably wrong, they seem actually to be coeval with La Tène I or II elsewhere. I should conjecture that the Iron Age settlement of Hengistbury began in early La Tène days; its parallels with south-west France mark the opening of trade and intercourse between the Garonne and Hengistbury, at a date when the La Tène culture already prevailed in Britain and the Hallstatt culture had not perished from Aquitaine. It is even possible that this trade or intercourse was the origin of the settlement. Unfortunately, Mr. Bushe-Fox, while calling his Class A the oldest pottery of the site, gives no reasons for that opinion.

Through the various stages of the La Tène period the settlement lasted, and intercourse continued with western France. Mr. Bushe-Fox even suggests that wine was brought here in Roman amphoræ before the Roman conquest of A.D. 43. One would like to know whether that wine came from Gaul or Italy: are we to think of Hengistbury feasts as brightened by Chateau Neuf des Papes and St. Peray or by Amiuncan and Falernian? Anyhow, in the Roman age this intercourse ceased. Better routes connected Britain with northern Gaul than the long sea passage from a now remote corner of the island to a remote harbour of the Atlantic coast. The interest of Hengistbury changes. Its Romano-British age shows us curious traces of metal-working and a vast mass of British coins, possibly minted on the spot about A.D. 150. Of the sequel we know little. Scanty items prove that men dwelt here till about A.D. 350; then, as the countrymen of Hengist attacked the British coasts, Hengistbury lay desolate till this day.

Two points in this story are very noteworthy, the prehistoric relations with western Gaul and the British coins of the Roman age. In both matters, Mr. Bushe-Fox's finds will help to advance knowledge. Of pre-Roman trade from Brittany and the Loire and the Garonne to Britain we knew something already; we could also point to continental products as old as the sixth century B.C. scattered up and down our islands. But till Hengistbury was explored we could not mention any definite spot by which continental influences entered. Perhaps we may now go further and argue from the details of Hengistbury to the distribution of such influences. Mr. Bushe-Fox notes on page 9 that the pre-Roman potsherds of Aylesford (explored by Sir A. Evans), and also those of Somerset (Wookey, Glastonbury) and Wiltshire, differ from those of Hengistbury, and he seems a little surprised; he reaches the conjecture that much of the Hengistbury pottery "was acquired direct from continental ships and never penetrated inland to any great extent." I am not sure. In particular, I do not know which classes of Hengistbury pottery can be said to be of foreign origin and not to recur in Britain. Two classes (F, G) do not recur in Britain, but they are equally wanting abroad; the rest seem to appear on other British sites. Class A, for example, has been met with on several Wiltshire sites. One's knowledge of the whole subject is, of course, very scanty, but, on Mr. Bushe-Fox's evidence, I should incline to suggest (as indeed our literary evidence rather implies) that prehistoric Britain had two entrances or groups of entrances from Gaul. One was in east Britain and affected Aylesford; the other was in the south, and affected Hengistbury and its hinterland. By these two channels came somewhat different influences; the diversity of Hengistbury and Aylesford is therefore natural. On the other hand, the difference between Hengistbury and Glastonbury is in large part a difference in age; the former began a couple of centuries before the latter.

Secondly, the coins. Hengistbury in general yielded next to no coins. But one little patch of earth, less than 30 feet in diameter (say, 75 square yards), produced

a huge find. Scattered up and down it were a gold tore, a small cake of crude copper, vestiges of a metal worker's "hearth," and some thousands of coins. Of these coins Mr. G. F. Hill examined rather more than 3,000, and had submitted to him (as he tells me) the débris of some 300 more, too perished to be "examined" in any real sense; in addition, a "large number" were so ill-preserved that they could not even be taken out of the ground; the original total at the spot must have been nigh on 4,000. Those examined by Mr. Hill comprised 100 Roman (down to about A.D. 150); secondly, about 1,300 British coins (mostly bronze) of types already familiar in south-west Britain; thirdly, about 1,660 British bronze coins of a most unusual type, produced by casting from clay moulds, not by striking. The whole 3,000 to 4,000 seem to have been deposited together in some fibrous wrapping (of which traces survived) and formed therefore a hoard, which, if we may judge by the latest Roman coins, was buried or lost about A.D. 150. The Roman and the ordinary British coins were more or less worn and had been in ordinary circulation. The cast pieces were practically unused. These latter all probably belonged to the same date; they exhibit many varieties, but these varieties are not (I think) due to a slow degradation such as produced the varieties of the normal British coinage; they must be ascribed either to carelessness or perhaps rather to the desire of the caster to create (as he easily could) a large number of different sorts. We may, then, date the making of the cast coins to the period when the hoard was deposited. These conclusions are confirmed by another hoard, found in south-west Hampshire at an unrevealed place and published in 1911 by Mr. G. F. Hill. It contained 674 coins—about sixty Roman (down to about 135 A.D.); 300 south-western British of known types, mostly bronze, and worn by circulation, and just over 300 "cast" bronze, precisely similar to those of Hengistbury and, like them, practically unused. These two hoards contain, with one or two trifling exceptions, all the examples of the British "cast" coins yet detected. They are the latest known British coins, and indeed by far the latest; the next latest case is a hoard of ordinary British issues buried about A.D. 72, seventy years earlier.

What do these strange finds mean? Neither Mr. Bushe-Fox nor Mr. Hill offer an answer, and it is rash to rush in where they fear to tread. We need more analyses of the metal of the "cast" coins (those on p. 75 are insufficient), and also analyses of the ordinary British coins (to show if the cast pieces were made by melting them); we need also to know if cast coins are lying unrecognised in any collections—and much else. But it is tempting to connect the cast coins with that curious revival of things Celtic which occurred in the Western Empire of the second century. For these coins are clearly not survivals, but a revival after a long lapse of time. We may think that, as the Roman Government did not forbid the use of British coins, and as Hengistbury (as has long been known) lay in a remote un-Romanised corner of Britain, and as it had metal-workers with a supply of copper, one or other of these workers may have taken to minting and, in harmony with a tendency of his age, may have tried to revive the old native coinage. Trading considerations, too, may have played their part. But the experiment failed; the cast coins never became current. A hundred or one hundred and fifty years later, unauthorised minting was again attempted, and it succeeded. But the coins now copied were not native; they were the "third brass" of Tetricus and his contemporaries. That is some measure of the difference between the Britain of Pius and the Britain of Postumus.

It may be asked, had Hengistbury ever any connection with the prehistoric tin trade? It is not impossible. But there is absolutely nothing in the Report to suggest it.

I add notes of one or two slips worthy of correction in so good a monograph:—P. 9, Mr. Bushe-Fox refers in passing to Roman amphoræ found at Hengistbury

and dating (as I have noted above) from before A.D. 43. The Report contains no account of such. Yet it would be interesting.

Pp. 24-26. The size of area III in Fig. 17 does not agree with the size given in the text, and much of the lettering of this figure is not explained. The description of the "associations" of the coins (p. 25, lines 2-6) is not at all clear. There is, too, an unfortunate contradiction between pp. 25, 26, and p. 65 *note*, as to the respective numbers of cast and other coins. At the bottom of p. 25 Mr. Bushe-Fox also commits himself to the equation: $100 + 1300 = 3000$.

P. 37, 40. The date B.C. 200 for Wookey is doubtful, as I pointed out in my *Roman Britain* in 1913. Mr. Bushe-Fox recognises this, but then proceeds to use the date.

Plate XXIX, 6. The "association" of this object is diversely stated on pp. 36, 61. A parallel for it can be found at Ham Hill, Somerset, which I have figured in the *Victoria History* of the county.

Plates XXXIII, XXXIV. Heights and contours are very badly needed on these two maps, and also some means of adjusting one to the other; it is a pity that they differ in scale.

F. HAVERFIELD.

ANTHROPOLOGICAL NOTES.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL
INSTITUTE.

32

(Donor indicated in parentheses.)

A History of the Family as a Social and Educational Institution. By Willystine Goodsell, Ph.D. $8 \times 5\frac{1}{2}$. 551 pp. Macmillan & Co., Ltd. 8s. 6d. net. (Publishers.)

Diopetrographic Tracings in Three Normæ of Ninety Australian Crania. By R. J. Berry, M.D.Edin., F.R.C.S.Edin., F.R.S.Edin., and A. W. D. Robertson, M.D.Melb. (Trans. of the Royal Society of Victoria, Vol. VI, 1914.) $12\frac{1}{4} \times 10$. 6 pp. 270 Life-size Tracings. (Royal Society of Victoria.)

Los Aborígenes de la Provincia de Imbabura en la República del Ecuador. By J. Jijón y Caamaño. $11\frac{1}{2} \times 9\frac{1}{2}$. 345 pp. 80 Illustrations, 64 Plates. Blass y Cia, Madrid. (The Author.)

The Jews of Russia and Poland. A Bird's-eye View of their History and Culture. By Israel Friedlaender, Ph.D. $8 \times 5\frac{3}{4}$. 210 pp. G. P. Putnam's Sons. \$1.25 net. (The Publishers.)

La Race Chamitique. Par Théodore Vibert. $7\frac{1}{2} \times 4\frac{3}{4}$. 415 pp. Ernest Leroux, Paris. 3 fr. 50. (The Publishers.)

Les Sculptures et Gravures de pieds Humains sur Rochers. By Dr. Marcel Baudouin. $9\frac{1}{2} \times 6\frac{1}{4}$. 121 pp. Illustrated. Secrétariat de l'Association. (The Author.)

La Sépulture Néolithique de Belleville à Vendrest (Seine-et-Marne). Rapport Général par le Dr. Marcel Baudouin, avec la collaboration de MM. L. Géraux, A. Guébbard, E. Hue, H. Martin, P. Regnier, et E. Taté. $9\frac{3}{4} \times 12\frac{1}{2}$. 260 pp. 28 Illustrations, 16 Plates. Société Préhistorique Française. (Dr. Marcel Baudouin.)

L'orientation des Mégalithes funéraires et le culte solaire à l'époque néolithique. Les Rochers à Sabots d'Equidés et la théorie de leurs légendes. By Dr. Marcel Baudouin. $10 \times 6\frac{1}{2}$. 218 pp. (The Author.)

L'Ossuaire de la Ciste des Cous à Bazoges-en-Pareds (Vendée), découverte, fouille, description du mobilier funéraire et des Ossements et Restauration. Par Dr. Marcel Baudouin et Lucien Rousseau. $10 \times 6\frac{1}{2}$. 91 pp. Illustrations and 10 Plates. Bureaux de la S.P.F., Paris. (Dr. Marcel Baudouin.)



SIR CLEMENTS MARKHAM.

ORIGINAL ARTICLES.

Obituary.

With Plate D.

Maudslay.

Sir Clements Markham. *By A. P. Maudslay.***33**

The death of Sir Clements Markham in tragic circumstances has been a great blow to his many friends, and the circle was a wide one, for his was not only a distinguished personality but one that inspired affection. The daily press has given us an account of his varied attainments and enterprises from the day when, still a midshipman, he importuned the Admiralty until he was allowed to go on a Polar expedition, through his journeys in Peru in search of Chincona, his sojourn in India, his secretaryship to Lord Napier of Magdala during the Abyssinian Expedition, and his long and distinguished connection with the Royal Geographical Society and the Hakluyt Society.

However, he began life as a sailor, and once a sailor always a sailor; he loved the navy, and in spirit remained a midshipman to the end of his long life. Nothing could be more delightful than his affectionate comradeship with young people. He would go down to his old school, Westminster, mingle with the boys, and bring home two of them for the week end, take them to a theatre, and give them a good time. His knowledge of old voyages and travels was profound, he was the Nestor of Arctic and Antarctic exploration, and never lost his interest in the study of early Spanish and Portuguese voyages and expeditions, as the many volumes he edited for the Hakluyt Society evince. His pen was busy to the last, and a store of knowledge has passed away with him which may never be replaced.

Sir Clements was not a Fellow of the Institute, but always gave it his sympathetic support and was one of the best and most punctual reviewers for MAN, and quite recently contributed to the *Journal* a most valuable paper on the Tribes on the Amazon. His cordial collaboration with the officers of the Institute during the Americanist Congress held in London in May 1912 was greatly appreciated, and his nomination as President of that Congress was enthusiastically endorsed by all the foreign delegates and members.

ALFRED P. MAUDSLAY.

Canada: Anthropology.

Breton.

Anthropology in Canada. *By A. C. Breton.***34**

Since the British Association met at Winnipeg in 1909, the study of anthropology has made good progress in Canada. The establishment by the Dominion Government of an Anthropological Division of the Geological Survey under the Department of Mines, with charge of the Victoria Memorial Museum at Ottawa, has made a splendid centre of research, and the reports and special papers issued by the Division are full of information gathered from all parts of the country.

In 1914, Dr. E. Sapir, in charge of ethnology and linguistics, completed a five months' trip among the Nootka Indians of the west coast of Vancouver Island, following his previous visit in 1910 to the same tribes, the Ts'ish'a'ath and the Hopach'a's'ath, near Alberni. Further material on the Nootka language and a large series of texts dealing with ethnological topics and mythology were obtained, with information on types and inheritance of privileges, names, potlatches, secret rituals, supernatural beings, and religious beliefs. A number of ceremonies were witnessed and careful notes taken, especially of a doctoring ceremony known as Ts'ayek that had not been performed for many years. A series of face paintings and other drawings were made by some of the Indians, and valuable information on religion and ceremonials was acquired in connection with them. The division now possesses 200 distinct Nootka face paintings. Dr. Sapir investigated the possible linguistic

affiliation of the Athabaskan, Haida, and Tlingit languages, hitherto generally considered independent stocks. The result was the demonstration of the genetic unity of these three groups of languages.

Mr. A. A. Goldenweiser continued his work among the Iroquois of New York State (*see* Report of 1912), chiefly with the Tuscarora at Lewiston, N.Y., recording their names, and has now 500, about half of them translated. Mr. W. D. Wallis spent nearly four months in southern Manitoba studying the Dakota (Sioux), and visited the reservations at Portage la Prairie and Griswold. The Dakota were found to be a conservative people, rich in ethnological data and in material culture. A long and full account of the dance and ceremonial organisations was obtained, also a fairly complete description of the Sun Dance, the Medicine Society, and the complete cycle of the Spider Myths. Over 50 songs were recorded.

Mr. C. M. Barbeau spent three months in the winter of 1914-15 in ethnological field work among the Tsimshian proper, now gathered at Port Simpson, B.C. The work consisted mainly of an exhaustive study of the social organisation of nine or ten Tsimshian tribes, formerly occupying the Lower Skeena River and the adjacent coast. A collection was made, at the same time, of ethnographical objects illustrating the culture of these Indians. A series of photographs of ethnological value was also secured. During the summer Mr. Barbeau spent three weeks in collecting folk tales from the French Canadians of Kamouraska County, Quebec. One of the main objects of this trip, as of a similar trip undertaken the preceding year, was to secure a definite basis of comparison with Indian folk-lore. The character and extent of European influence in aboriginal American folk-lore can by this and similar researches be established with some definiteness.

Mr. F. W. Waugh, who has devoted a great deal of time in recent years to the material culture of the Iroquois, spent two months of this summer in additional field work among the Iroquois of Six Nations Reserve, Ontario. The greater part of the time was taken up with the collection of Iroquois myths and miscellaneous customs and beliefs included in the term folk-lore. The myths, including such as have been recorded in previous trips by Mr. Waugh, embrace something like 130 stories. These, together with the data on folk-lore referred to, should give a fairly representative idea of an aspect of Iroquois culture concerning which relatively little has as yet been published. A number of ethnographical specimens of very considerable interest was also secured by Mr. Waugh.

M. J. A. Teit spent the summer in field work among the Athabaskan tribes of the Stikine River region. He visited the Kaska of the interior, and also continued work among the Tahltan previously begun. A large amount of general ethnographical information, including vocabularies and myths, was obtained, also museum specimens and photographs.

Mr. F. H. S. Knowles, the Physical Anthropologist of the Division of Anthropology, continued the anthropometric work among the Iroquois which had been begun some years before, but which had been interrupted by illness. Tonawanda Reserve, in New York State, was first visited, while the rest of the season was spent in Six Nations Reserve, Ontario. A large number of measurements was secured at these places, which, together with the measurements previously obtained, afford, it is believed, an adequate basis for the determination of the extent of the physical variation among the modern Iroquois. Work on Iroquois skeletal material was also undertaken at the museums in Toronto and Buffalo. It is intended ultimately to compare the results obtained from the ancient and modern data with each other, with a view to defining the nature of the changes that the Iroquois physical type has undergone since contact with the whites. An excellent series of photographs of modern Iroquois men and women was made by Mr. Knowles, also a series of six

relief models of men and women in profile. In 1914 he studied skeletal material from mounds in Manitoba and that from the Roebuck site and ossuary near Ottawa.

At Quebec, the Museum of Laval University contains a number of authentic Huron skulls, collected by the late Dr. J. C. Taché from undoubted Huron graves.

R. M. Anderson, Executive Head of the Southern Party, Canadian Arctic Expedition, wrote from Bernard Harbour, Dolphin and Union Strait, N.W.T., Canada, 29th July 1915:—Mr. D. Jenness has been able to accomplish a great deal of ethnological work among the hitherto little-known groups of Eskimo in this region, including numbers of Akuliakattagmiut, Haneragmiut, Uallirmiut, Puiblirmiut, Pallirmiut, and Kogluktogmiut. He finds that these groups are not as definite as was formerly supposed, in fact the groups are pretty thoroughly mixed, both by intermarriages and by families shifting from one group to another, nearly every group containing individuals from other groups more or less remote. He has made good progress in linguistic work and vocabularies, made fifty or more gramophone records of various Eskimo songs and spoken words which he has had repeatedly reproduced before the natives, so that he could get the text letter-perfect and translated for comparison with other Eskimo dialects. A considerable number of photographs of the Eskimo, with note on their life and customs, has also been made by Mr. Jenness and other members of the party. Mr. Jenness' facility in learning the Eskimo dialects and the customs of the people has been of great service to the Expedition in many ways. He made many trips to the islands in the Strait and to Victoria Island in the winter, and, in addition to his ethnographical work, usually obtained and brought home a quantity of fish, caribou, or seal meat to the station on each trip, as well as engaging with natives to bring more meat over. While at the station Mr. Jenness acted practically all the time as interpreter and purchasing agent of the party in trading with the natives for fresh and dried meat, fish, skins, and clothing. In doing this work he collected a large number of specimens of Eskimo tools, weapons, and other implements, clothing of all kinds, stone lamps and pots, a collection which is pretty complete for this region.

In the early spring Mr. D. Jenness arranged to spend the summer with the Eskimo in the heart of Victoria Island, and had a good quantity of provisions hauled across Dolphin and Union Strait in April, and cached on the south side of the island. He engaged a middle-aged Eskimo, named Ikpukkuq (who had been in that part of Victoria Island before), together with his family, to accompany and help him during the summer, supplying the man with a rifle and ammunition, which, together with a tent and other things, are to be given him if he serves faithfully. Mr. Jenness started on April 13th, 1915, for Victoria Island, with this family of Eskimo, to follow the Barren Ground caribou migration north across the Wollaston Peninsula, then go up to the head of Prince Albert Sound, ascend a large river to a big lake called Tahieryuak, in the interior or west central part of Victoria Island. When the snow disappeared they intended to cache their sleds, either at the head of Prince Albert Sound or at the lake, and continue their journeys during the summer with pack dogs. That region is the summer hunting and fishing ground of a large number of the Kanghirimiut (Eskimo of Prince Albert Sound), and it is hoped to gather much new and valuable material concerning this hitherto little-known group.

Mr. Wilkins exposed about 2,000 feet of cinematograph film, chiefly on views of the local Eskimo, and has also made a very good series of portraits of most of them, in full view and in profile.

Mr. Harlan I. Smith, Archæologist of the Division, in 1914 excavated the shell heaps of Merigonish Harbour, the result being perhaps the most complete and detailed data so far secured on the archæology of Nova Scotia. There were no burials. The

shell heaps were usually in the most sheltered places on the southern shores, and on islands rather than on the mainland, above high tide. Stone celts, pottery, and sharpened bones were very numerous, also little knives or chisels made from beaver teeth, and bone harpoon points. Gouges were entirely absent, though common in other parts of Nova Scotia.

The most important archæological work has been that carried on under Mr. Harlan Smith's direction by Mr. W. Wintenberg at the Roebuck site, south of Ottawa, and eight miles from Prescott, on the St. Lawrence. This is one of five ancient sites within a radius of five miles, usually on a low hill near a spring or small stream, a location entirely different from that of the sites along the Ottawa River and in the Lower Nation valley. The Roebuck site is on sand, the upper part very dry with a gradual slope to a swamp, apparently an ancient lake bed. It was enclosed by three rows of palisades, indicated by black ashes in holes. The skeletons found were very brittle but those in sand were in good condition. The skulls were compressed and their shape was also altered by the position in which they had lain. There were two types, the Iroquois being most frequent. Refuse heaps, in which

were some skeletons, vary from a few inches to four feet in height, although the ground has been constantly ploughed over since 1820. There were human lower jawbones, cut off seemingly from fleshy skulls. Polished stone implements, and some of bone and antler, were found in the first season's digging, but only two chert arrow points. The sites are indicated by black or dirty spots caused by the rubbish of habitation, and any one of them would furnish material for explorations extending over many months, or even years. Nearly a hundred skeletons were obtained, and many of them photographed *in situ*. Several show conclusively that the people suffered from diseases which caused growths upon the bones and the abnormal union of certain bones. Their teeth gave them much trouble, and there was great infantile mortality. Fragments of pottery were plenti-



POTTERY VASE FROM ROEBUCK SITE, NEAR OTTAWA, FOUND WITH SKELETON NO. 12, UNDER REFUSE HEAP NO. 1. THE LIGHT LINES ARE INCISED, THE DARK LINES RIDGES.

ful, also sharpened bones, perhaps used as awls. Stone arrow points were very rare, the grooved axe has not been found, and even the celt is represented by only a few specimens. The pottery is deeply incised with lines forming patterns. Pottery pipes represent human faces. Charred maize and beans prove agriculture. The traces of the palisade which had surrounded the site were uncovered and mapped, the holes once occupied by posts being black hollows. Mr. Wintenberg also made a reconnaissance in the same district, and found some rich similar sites (supposed Iroquois) and a number apparently of Algonquin origin. Several cultures are represented by specimens from the vicinity.

For 1915, the archæological fieldwork has included the following :—

In Manitoba, Mr. W. B. Nickerson continued his researches. Only one artificial mound was found on a conspicuous headland overlooking the Assiniboine River, about

six miles north of Alexander. This was explored, and proved to be a burial mound. Among the finds were 162 marine shells ground across so as to form an eye to allow them to be fastened to a garment or strung as beads, and six cylindrical objects—beads or pendants—made of the columella of the conch. They indicate trade or expedition as far as the sea. Two groups, each of more than one hundred gravel mounds, on terraces in the Assiniboine valley, were found to be of natural origin, although resembling artificial burial mounds in appearance. No mounds were seen in the valley of the Little Saskatchewan, and slight evidence of habitation. Near Arden, Mr. Nickerson explored a long mound, consisting of two dome-shaped ends with a connecting grade, and a broad, dome-shaped mound, in which were parts of three human skeletons, a perforated shell disc, and two bone objects, probably used as bracelets. A third mound, within the village of Arden, had been previously disturbed. There are several camp sites at the foot of the Assiniboine hills at springs forming small streams, also in the vicinity of Arden, along the White Mud River. Mr. Nickerson took seventy-five photographic films in connection with this work. In 1914 he had explored ancient mounds and sites, obtaining a number of human skeletons. Amongst the specimens, besides what is ordinarily found in the region, were rare objects of stone, copper, and marine shells. He thinks the culture very old—oldest in the Pembina valley and most recent in the Souris valley, where pottery is plentiful.

In British Columbia, Mr. Harlan Smith inspected sites and collections near Kamloops, Lytton, and Yale, and photographed specimens from near Yale in three unobtainable private collections. These were of sculptures, among the most striking known from Canada. He also inspected the great shell heap, the refuse of a prehistoric village at Eburne, south of Vancouver, found a few specimens, and noted that since his exploration here in 1898 much of the site left unexplored had been removed for roads or building purposes, or had been covered by pavements and buildings. One fine mortar bearing the sculpture of a human face was found at the site. A shell heap at the mouth of the north arm of the Fraser River was visited, and two small ones were located in Stanley Park, Vancouver, one near the north entrance, the other near the western side. At Crescent, a rich large shell heap, said to contain cairn burials, was visited, and some specimens were secured. There is a prehistoric fort about a mile south of Crescent, on a bluff overlooking the sea, consisting of a semicircular embankment about 4 feet high by 8 feet wide with exterior ditch 4 feet deep by 12 feet wide, and defending the land side of a small area. This should be preserved. A fir stump about 10 feet in diameter stands on the embankment, showing that the age must be considerable. Petroglyphs were recorded from the west of Vancouver Island.

A reconnaissance was made up the Skeena valley into the Bulkley as far as Hubert. Four extensive shell heaps, marking as many ancient villages, parts of them shown to be at least several hundred years old by the large tree stumps on the top layers, were found near Prince Rupert. The southernmost is at the place marked Willaclagh on Dawson's map of 1879. Dried bodies are reported in a cave on Birnie Island, opposite Port Simpson, and a high shell heap with trees over a hundred years old standing on top, at the Quarantine Station on Digby Island. Human skeletons and specimens are said to have been found there in abundance, and were sent to Dr. C. F. Newcombe, of Victoria. A very deep shell heap and burials on Little Digby Island, a village site seven miles up Kitsumgalum River, and an extensive and old site on the west side of Skeena River, between Fiddler and Lorne Creeks, were also reported. Graves are said to have been cut through by the new Grand Trunk Pacific Railway. At the outlet of Lake Kathlyn a small camp site was excavated. It contained charcoal, ashes, fire-cracked stones, bones of deer, beaver,

and fish, but only one chipped stone point, one of bone, and a sharpened piece of bone.

Tiresome, and often disappointing, as these reconnaissances are, if they could be carried on all round the coasts of the Americas the results would certainly be of high interest. Through Mr. Harlan Smith's previous researches in the southern interior of British Columbia, chiefly at Lytton, on the C.P.R., some remarkable sculptured figures came to light. His illustrated handbook to the archaeological collection from that region in the museum at Ottawa, published by the Survey, and Dr. C. Newcombe's guide to the anthropological collection in the Provincial Museum at Victoria, also well illustrated, give an excellent idea of some of the important cultures of British Columbia.

From the foregoing, it will be seen how liberal the Dominion Government has been in its endeavours to promote the study of the native peoples. Canada now has some thirty museums, from Halifax with the Provincial Museum and that of Dalhousie University, to Victoria, where the Provincial Government contemplate raising an even finer museum than the present one. At Ottawa, the museum of the Survey, which dates from 1843, now occupies the great Victoria Memorial Building, erected at cost of over a million dollars. It has a library of 20,000 volumes and the publications of all scientific institutions, and the photographic division has a vast store of negatives taken on expeditions, and lantern slides for use in lectures. The staff endeavour especially to make the museum of value educationally, and the children are attracted to it. Only a small part of the collections can be shown at one time. Amongst them is a complete ethnological and archaeological Labrador Eskimo collection, with interesting comparative specimens from neighbouring tribes. Toronto has the Royal Ontario and the Provincial Museums. The former possesses the cranial collection of the late Sir D. Wilson, and a fine series of skeletons from mounds in Ontario and Manitoba collected by Professor Montgomery. The latter has a remarkable set of skulls from Ontario, and every kind of stone implement brought from ancient sites in the Province by the late Dr. David Boyle. The bird stones and plaques make this collection unique.

The Rocky Mountains Park Museum at Banff was recently rearranged by Mr. Harlan Smith to be an ideal local museum as far as possible, and, with a handbook, also prepared by him, to be a centre of education for the neighbourhood. In addition to a full local natural history collection, the museum has many objects of great interest, formerly belonging to the Blackfoot, and mostly lent by Canon H. W. Gibbon-Stocken, of the Blackfoot Reserve, Gleichen. Mr. Harlan Smith notes two ancient sites near Banff with semi-subterranean houses, and at Lake Minnewanka a site where rock was broken and chipped into arrow and spear points. The handbook is a good model for the arrangement of any popular local museum.

A. C. BRETON.

Indonesia.

Forbes.

The Orientation of the Dead in Indonesia. By H. O. Forbes.

35

IN MAN, 1916, 25, Mr. Perry finds me very contradictory of myself and others in the criticisms I ventured to make in MAN, 1916, 3, on his paper on the *Orientation of the Dead in Indonesia*,* the object of which was to warn him that, in my opinion, the evidence adduced for orientation of the dead in Timor-laut was not entirely reliable. Mr. Perry apparently accepts my evidence as conclusive, yet later leans to the opposite opinion.

Mr. Perry is quite misguided in charging me with quarrelling with my own spelling when I affirm that the name for the land of the dead in Timor-laut was

* *Journ. Roy. Anthr. Inst.*, Vol. XLIV.

Nusa nitu. I did not inscribe the particular Nusnitu on the map of Timor-laut in my *Wanderings*. Numerous Nusnitus are known to me all over the archipelago. The Tenimberese, I again aver, were totally ignorant of where their Nusa nitu was. The "near Ceram" which they gave to me as the probable locality was an equally vague place—possibly heard of from traders—somewhere. No traveller has ever yet met with the man, who, though he may have passed or landed on many a Nusnitu, has seen or passed along the Nusa nitu of his own folk—and lived to tell the tale. There is all the difference possible between some specific Nusnitu and *their* Nusa nitu, which is just as impossible of location as our Hell. If Nusnitu, west of Selu, were the land of the Tenimberese dead, "not a soul" would venture to live near it or within sight of it, and, moreover, it could not bear west from every village in the group, and it could have been easily indicated to me.

I hope Mr. Perry does not misinterpret me, in supposing I reject everything written by Riedel about Timor-laut; I even helped him to some material myself. I certainly reject, however, the three affirmations set out on p. 34 credited to Riedel, as customs prevailing in Timor-laut. Each of them may be individually now and again true; but none of them possesses the uniformity of an invariable custom.

As to "notables"—not my designation—and commoners, I am unconvinced that there exists such a grade as the former—all are equally common—and I would like to add, unclean. The important man among the Austromalaysians is one of the elder men, but more frequently he who can talk loudest and longest, especially here when more inebriated than his co-villagers; and he might be important to-day and unimportant to-morrow. If I am at variance with Riedel, Van Hoeyell, Jacobsen, and Van Doren, Mr. Perry must remember that I am only a simple eye-witness of the year 1882, trying to relate actual experiences—have these writers (with whom, except Riedel, I am unacquainted) been equally circumstanced?—and not an arm-chair philosopher. By "better class" or "important" people burials, I understand those with relatives or friends with more wealth or pride than their neighbours who provided a more ostentatious burial. A family may bury a son more sumptuously than their decrepit father, who possibly might have been once esteemed as a "notable." At all events I have seen burial-platforms on the same sea-shore nearly at right-angles to each other, and an oratorical elder laid on a rock. The designation *Orang kaya** is a loose and inaccurate term to apply—I cry *peccari* for using it—to the "better class." It has no place in the Tenimberese language, though it is a *lingua franca* word for "rich-" or "head-" man and is often inaccurately applied to persons in Austro-Malayan lands and New Guinea who appear prominent but to whom it is quite inappropriate to apply the term "chief."

Mr. Perry errs also in reading into my telling that "notables" can really be distinguished from unimportant persons by their burial platforms. Some indication of a person being "important" might be obtainable on the occasion of his burial; but it could not be easily determined afterwards from a sepulchral monument or its orientation whether an important or an unimportant person occupied it. My opinion, however, was fairly deducible from my words on p. 8, and in the third paragraph from the end of my note in MAN, 1916, 3.

I entirely disagree with Mr. Perry's observation that "geographical considerations" may very well reconcile my statements "with those of the two Dutch authors"; for I cannot see how the bodies of those "platformed" on the east and west coasts are to be orientated in the same direction unless their heads be turned about, and away from the water. The same remark applies to the dead laid out on the north and south coasts, and on the shores of every deep indentation of the coast. The platform is really a boat, whose prow would not be pointed landwards.

* (*cf. Journ. Anthr. Inst.*, xiii, p. 21.)

With regard to my statement that there is "practically no interment in Timor-laut," Mr. Perry has discovered, with considerable satisfaction, that I again contradict not only myself but other people. Mr. Perry must offer my apologies to the "other people." Could I have anticipated the future dissection of my poor narrative by so scientifically accurate an anthropologist I would have been more careful as to the wording of the passage on page 324 of my *Wanderings*, and inserted the words, "some natives said that the bodies . . . are deposited . . ." As a matter of fact I saw no *interments*; and all those who died violently when we were on the islands were laid on the rocks in the more usual way. Enemy bodies fared rather badly; they were hung upon the trees dismembered. I discredit, therefore, the earth-sepulture—chiefly because of its difficulty—as a custom from which any deductions can be securely drawn. According to Riedel his medicine men and unimportant people are buried; his "notables" or important people are placed on platforms. To what class then do those ostracised bodies placed on the rocks belong? Hence it is that I am unconvinced, because Mr. Perry's arguments are not convincing to one whose intercourse in the daily life of the people enables him somehow to detect when a deduction therefrom fails to ring true, though he may not always be able to put his reasons clearly in words; nor to give a satisfactory explanation of his own.

Finally, with regard to the orientation of the dead among the Baduwi, Kalangs, and Tenggerese, it is obvious that they present a case of discontinuous distribution in a race who formerly occupied more of Java than they do now. In the well-known Eur-Asiatic distribution areas of the Tit, *Parus palustris*, the one separated by a clean break of 60° of longitude from the other, the species in both areas retains unchanged its characteristics of song, nest-building, feeding, &c. So it seems incredible that the Baduwi, the Kalangs—their near neighbours—and the distant Tenggerese, all belonging to the same stock, can have, all three, discordant traditions as to their motherland, because some of their folk have died or been driven out of the intermediate region. To my way of thinking—with the utmost deference to Mr. Perry—one ought to expect, not a different, but a similar direction of orientation, if there be any truth, and not the appearance only of it, in the theory he is supporting. If the theory *be* true more evidence is required to prove it. HENRY O. FORBES.

Gold Coast Colony: Archæology.

Migeod.

Discovery of Presumed Palæolith. By F. W. H. Migeod.

36

The chipped stone, of which photographs appear herewith, was picked up

by me not far from the village of Bosomechehe, in North Ashanti. The exact place was about 46 miles along the motor road which runs north-easterly from Kumasi to Ejura.

The country there is covered with dense forest. This extends all the way from the coast, some 200 miles off. A few miles farther on it changes somewhat abruptly to grass land, with timber trees of smaller size and of quite different species. It was whilst my motor car was delayed for about three hours owing to a tree having fallen across the road and having to be cut through, that I came across this stone.

The road there is red clay, as it is practically for the greater part of the 61 miles of its length. The process of construction has been to remove the surface soil of vegetable origin until the clay



FIG. 1.

was met and a firm surface obtained. In parts this clay contains small ferruginous stone, which is commonly called laterite, and is used for metalling where granite is not readily obtainable. Where the stone lay, however, no metalling had been put down, but the ruts had been filled as necessary with earth from the banks. The stone was not embedded at all in the surface of the road. I formed the impression that it had been in the earth thrown on, which itself had been previously removed from the road in the course of construction.

There is, therefore, nothing positive to go on for estimating the age of the stone. Wherever it came from, it seems to me unlikely that it could have come out from the clay at any greater depth than 2 feet, for the clay is not usually removed from the surface more than absolutely necessary for levelling. The gutters are not more than 2 feet deep, and, further, there was no cutting near.

As far as my information goes no other palaeolith has ever been found in Ashanti. The presence of any in the colony generally had, in fact, never been noticed until last year (1914) when some rough stones of a palaeolithic nature

—of quartzite—were picked up at Accra, on the coast itself.

On the other hand, neolithic implements from many parts of the colony are plentiful, and it is only by reference to and in terms of these that we can possibly, I think, estimate the age of the palaeolith I found.

I have picked up many neolithic stones on the surface of the ground, but never one buried in such a position that I could say definitely it had lain there undisturbed. I have, however, been fortunate enough to unearth neolithic pottery in the undisturbed clay (laterite), where it had every appearance of being in its original position. This pottery I dug up near Ejura, at 60 miles along the motor road. It lay quite 2 feet down in the solid clay and almost at the hill-top. It was visible in a cutting, and though I searched carefully I could not find any at a greater depth. This pottery I have assumed to be neolithic for two reasons. The design on it is different from any I have seen of present-day make, and I also found neolithic implements in the immediate vicinity.

In view of the comparatively small depth at which the neolithic pottery lay, the antiquity of the chipped stone under discussion cannot be very great, since its presumed place of origin is no deeper. In fact, in view of the local predominance of neoliths, I am inclined to regard this stone as one chipped experimentally and used for a temporary purpose. Such might have been the case if the user had no other implement, and was unable to provide himself for the time being with a properly ground adze. Since the material of which this adze is made is soft, there is all the more likelihood of this being the case. The implement is certainly not one that would stand hard wear without losing its edge.

The material seems to be a sort of chert, and rock of this nature is to be found 10 miles north, on the Ejura scarp, a ridge running east and west.



FIG. 2.



FIG. 3.

The measurements of the implement are about 4 inches by 2 inches by $\frac{1}{2}$ inch. It is deposited in the London County Council Museum at Forest Hill.

F. W. H. MIGEOD.

REVIEWS.

Calisthenics.

Ridgeway.

The Dramas and Dramatic Dances of Non-European Races, in special reference to the Origin of Greek Tragedy; with an appendix on the Origin of Greek Comedy. By William Ridgeway, Sc.D., F.B.A., Cambridge, University Press, 1915. 37

Professor Ridgeway "was ever a fighter." In this ample and profusely illustrated volume he has been moved to defend himself against critics who have attacked his theory on the origin of Greek tragedy, and to carry the war into the enemies' country. It will be remembered that the theory is that Greek tragedy arose from the periodical observances at the graves of the illustrious dead—that is to say, from "the indigenous worship of the dead"—and not from the worship of the Thracian god Dionysus; moreover, that if it did arise out of the worship of Dionysus, Dionysus himself was nothing else than a dead man. In the opening chapter of the present volume he discusses in detail the opinions of Miss Harrison, Sir James Frazer, Mr. F. M. Cornford, Professor Gilbert Murray, Dr. Farnell, and others, and pokes much fun at Mannhardt and the Tree-spirit theory, the Demon of the Year, and so forth. And he insists in true scholarly fashion on the necessity of distinguishing between the earlier and the later accounts, and on the greater authority to be conceded in general to the former.

Having vindicated his position as regards the origin of Greek tragedy against his opponents, he turns to other lands to find analogous cases, beginning with Western Asia. A long and interesting account of the Persian passion play is wound up with the inquiry: "Who will deny that Muhammad, Ali, Fatima, Hassan, and Hussein are as historical as Thomas à Becket, Charlemagne, Julius Caesar, or Jesus of Nazareth?" Nobody will deny it. But then nobody has denied that many dead persons have received the honours of canonisation, and indeed of apotheosis. It is when he seeks to put Adonis, Attis, Osiris, and Dionysus on the same footing as Muhammad and the others that we begin to be restive. For these mythical figures there is no historical evidence. Their legends are self-contradictory. It requires no Tree-spirit theory, no belief in an *enikantos-daimon*, to refuse to accept them as dead heroes. Sir James Frazer has gone too far in admitting that Osiris was a real man. The Memnonium at Abydos may have been believed to be his burial-place. It was built apparently under the twelfth dynasty, and so far as it has been excavated (if rightly identified) it is empty. Now it is suggested that Osiris was a king of the first dynasty. But between the first dynasty and the twelfth lies an interval of two thousand years, to say nothing of the confusion and changes involved in the Hyksos' invasions and conquest. Of what value as historical evidence is a building erected after this interval for the tomb of a king attributed to the first dynasty? Of what value is it that "under the New Empire it was boldly asserted that Abydos possessed 'the veritable body of Osiris'?" During the long Egyptian history it came to be believed that King Khent, one of the kings of the first dynasty, was Osiris. The tombs of the kings of the first dynasty were at Peqer, a mile and a half away from Abydos, and that of King Khent was among them, doubtless containing its proper tenant. Was Osiris buried at both places? The Egyptians, however, were not satisfied with two tombs. Under the twenty-second dynasty, more than a thousand years later than the foundation of the Memnonium, they built him a cenotaph at Peqer. Why a cenotaph? They might as well have provided him with a third

veritable body. Or if they seriously held that King Khent was Osiris, would it not have been sufficient to magnify and embellish his existing tomb? The cenotaph is evidence that they did not, in fact, know where Osiris was buried. According to Greek report Osiris was identified also with Men, founder of the kingdom, but Professor Ridgeway thinks this was a Greek blunder. At all events he was identified with the Sun, and with Apis, and a variety of other gods. Surely all this means that the Egyptians really knew nothing about Osiris the man, and that the belief in his humanity was a secondary growth. They had the divine legends, a mass of contradictory, marvellous, impossible tales, as such hagiologies always are, but they had no historical record. To assert the historical existence of Osiris as a man is to assert what in the present state of our knowledge is quite incapable of proof.

From Egypt Professor Ridgeway proceeds to Hindustan. He scores some excellent debating points against Dr. Keith: and the chapter contains an interesting summary of the *Ramayana* and the *Mahabharata*, as well as a valuable account of Hindu drama and the shadow-plays. It is, however, to make a large demand on our belief to require us to accept as real live men two such typical Hindu fairy-tale heroes as Rama and Krishna, the seventh and eighth incarnations of Vishnu. But Professor Ridgeway is not satisfied with this "bag." He flies at higher game. The Hindus do undoubtedly accord divine honours to some men, both dead and living. Now the great god Siva, the third of the Trimurti, recognised in the epics and *Puranas* as the supreme god, is of obscure origin and utterly unknown to the Vedas. "There can be little doubt," says the Professor, "that, as is held by the best authorities, Siva was originally a real man, who rose gradually to the great place which he holds now in the divine hierarchy by the process so well described by Lyall." I do not know who "the best authorities" are. At any rate Lyall is not one. After describing the process of apotheosis, Lyall says (*Asiatic Studies*, i, 49): "It may almost be doubted whether any god, except the Vedic divinities and other obvious nature gods, comes down the ladder [*sc.*, to manhood again as an embodiment or incarnation of the divinity] who had not originally gone up as a man, and an authentic man. The ascent of the elder Hindu deities is shrouded in the haze of past times; but several of the most eminent (Siva and Krishna, for instance) are still vulgarly reported to have been men." Thus he will not commit himself to the assertion that either Siva or Krishna was originally a man. On the contrary, his inclination is evidently to believe that those gods who are deified men do not attain any great distinction. "To quote examples," he says, "would be only to give a list of provincial deities, more or less obscure." And a little farther on: "Without doubt the Vedic deities, and a good many others which prevail in India, have been produced by finer and more intelligent handiwork, *sc.*, than apotheosis. Elsewhere (*Asiatic Studies*, ii, 306) he declares expressly: "Siva represents what I have taken to be the earliest and universal impression of Nature upon men—the impression of endless and pitiless change. . . . In Siva we have the condensation of the two primordial agencies, the striving to live and the forces that kill; and thus, philosophically speaking, we see in this great divinity a comprehensive transfiguration of that idea which . . . I hold to be the most natural religion." In other words, he does not hold Siva to be a deified man; and he is as little inclined to see a deified man in Vishnu. So far as I can gather, his view is indeed the converse of Professor Ridgeway's. He seems to hold that the great Nature gods were primary, and the apotheosised men, numerous though they may be, are only secondary and subordinate phenomena in religion—at any rate in the religion of India.

On the whole, however, Professor Ridgeway makes good his point that Krishna

and Rama are not vegetation demons or solar abstractions, whatever else may lie at the root of their mythical forms. The evidence is not conclusive that they were real historical personages. Much allowance must be made for the human habit of condensing into human form beings imagined from whatever cause. This the author is apt to forget. When he finds stress laid on the human side of an heroic figure, he contends that it is because the god or hero was once a man. This does not follow. Popular belief is good evidence of the direction of popular imagination and popular sympathies; it is very poor evidence of a matter of objective fact.

From Hindustan we are led to the Further East. The Thirty-seven Nats of Burma are described in detail. Certain of them seem to have been actual persons; about others we take leave to doubt. Special ceremonies are performed in honour of each of them, and the votary on whom descends the divine afflatus dances and sings in a special garb; but this is not uncommon. Many of the Chinese gods are said to be deceased human beings; and, of course, ancestor-worship has a prominent place in the religious system of China. Solemn dramatic dances were formerly held in the ancestral temples, and dramatic performances are still held in the temples of local deities—perhaps the direct descendants of the ancestral temples and the dances performed therein. So far the Chinese facts favour Professor Ridgeway's thesis. What is wanted is evidence that in no other temples than these are such dramas or dramatic dances performed. In Japan by no means all the gods are human ghosts. This is abundantly clear from the author's own citations, as well as from other passages of the Japanese chronicles. Nor can it be for a moment admitted that the attachment of extravagant legends to the name of a personage is a proof of his existence. It is only evidence of the belief of later (frequently much later) ages. For proof of his existence we must resort to genuine historical records, or to facts (outside the legends) authenticated by history, which cannot be explained without postulating his existence. Professor Ridgeway cites a number of cases of dancing, observing that "All alike seem to spring from the widespread custom of pleasing living kings and "other great personages by dancing before them, and from the natural extension "of this custom to heroic personages and divinities." But dancing is so old and universal an institution that he can hardly mean to limit it to these cases, whatever the context may suggest, especially if by "heroic personages and divinities" we are to understand the ghosts of deceased men. Was the Lord before whom Miriam and David danced nothing but such a ghost? The fact is that dancing as a religious exercise is no evidence as to the character and origin of the divinity honoured. I am unable to see that the Japanese Wind-gods are anything but examples of anthropomorphism, or that they are "not ancient," or that the calendar festivals are no more than festivals in honour of the dead. It is true that certain of their ancestors were honoured. But Shinto, though including much worship of the dead, is by no means that alone. The late W. G. Aston, a profound Japanese scholar, came, after his researches, to a conclusion almost diametrically opposed to that of Professor Ridgeway. "The importance," he says (*Shinto*, 36) "of the deification of human beings in Shinto has been grossly exaggerated both by European scholars and by modern Japanese writers. . . . The truth is that Shinto . . . has comparatively little worship of human beings. In the *Kojiki*, *Nihongi*, and *Yengishiki* we meet hardly anything of this element. None of their great gods are individual human beings, though at a later period a few deities of this class attained to considerable eminence and popularity." And elsewhere (43): "Even in the case of the deification of living and dead Mikados there is much room for suspicion of foreign influence. Of the deification of other men I find no clear evidence in the older records. It is probable, however, that some of the numerous *obscure* " [*italics mine*] deities mentioned in the *Kojiki* and *Nihongi* are deified men. A

"number of the legendary and historical personages named in these works were deified at a subsequent period. Others have been added from time to time." In short, apotheosis was a secondary and subordinate source of godhead.

Of the people of Australia nothing is more certain than that they are not addicted to the worship of the dead. Among the central tribes, Professor Ridgeway rightly says, "that the essentials of their religious and social life depend on their belief in the spirits of their ancestors." But they did not worship those ancestors, though their totemic ceremonies were rudimentary dramatic performances. It is doubtful whether anything that can be properly called worship of any being has ever been practised by the Australian aborigines. The nearest approximation is perhaps in the case of the Wollunqua; and he is an imaginary and gigantic snake. Even if the tribes of New South Wales worshipped Daramulun, there is no substantial evidence that he was a ghost. The assertion that totemic beliefs in general are based upon the primary belief in the immortality of the soul needs much more evidence than the author has afforded, even though we should not hold him to the literal meaning of the phrase, "immortality of the soul," in which no savage people known to me believes. Why, by the way, does the author quote only at secondhand from a book so easily accessible at Cambridge as the *Reports of the Cambridge Expedition to Torres Straits*?

Professor Ridgeway, in the course of the volume, raises in effect the fundamental question of the origin of religion, though he does not fully investigate it. He justly points out that the Melanesian *mana* is "a quality frequently possessed by ghosts," and draws the inference that it is a phenomenon secondary to the belief in the continued existence of the soul after death. But *mana*, as I have elsewhere (*Ritual and Belief*, 36-61) shown, is itself a development of a widespread and vaguer notion of a mysterious power or energy not necessarily resident in any human being, alive or dead. It seems to be in its essence impersonal, though liable to be personalised whenever it is conceived as acting. Hence it is not dependent on the belief in ghosts, and the criticisms directed in this respect to the Melanesian *mana* do not apply to the wider and what seems to be the earlier conception found elsewhere. It is because this fundamental question has been raised that I have dwelt on the euhemeristic aspect of the book. The author appears to admit certain exceptions to the ghostly origin of gods. It would be interesting to know definitely what exceptions he does admit, and why, and to what origin he attributes the exceptions. Every divinity he examines he resolves into a dead man. In ascribing, as I understand him to do, the origin of tragedy everywhere to the funeral and cultual rites of the dead, he is perilously near falling into the same error as that which explains every great figure as a vegetation demon or a sun-myth. It is not my business here to take up the cudgels on behalf of his opponents. They are quite able to defend themselves; and when they do we shall doubtless see some more sport. It is sufficient for me to say that in my view the day of a single all-embracing explanation of any of the great phenomena of human civilisation is over, and that gods and dramatic performances alike came into being in more ways than one; the cult of the dead was only one of those ways. In any case Professor Ridgeway has written a brilliant and entertaining volume, which touches on the cults and dramatic dances of more peoples than it has been possible to refer to here. It is a volume to be read and enjoyed, though its arguments may not all be accepted. The appendix on the origin of Greek comedy is an acute and powerful examination of a very interesting historical question. The illustrations, largely from photographs, throughout the book enhance its value. Some of them are very good. E. SIDNEY HARTLAND.

India : Anthropology.

Risley.

The Peoples of India. By Sir Herbert Risley, K.C.I.E., C.S.I. Second edition. Edited by W. Crooke, B.A. Luzac & Co. 1915. 21s. net. **38**

The republication of *The Peoples of India* was needed, not only as a monument to the brilliant author of the book, but as an important and valuable contribution to our knowledge of the religious customs and social structure of the millions who form so large a part of the British Empire. It is a book which, to those of us who had the privilege of knowing the author, is a memorial of a striking personality, a man always eagerly interested in every branch of anthropology. Ideas, fresh, stimulating, never failed him, and no one I think realised better than he how far we are from the last word in the studies which were so dear to him, to which he gave so much thought and care. The bulk of his work was accomplished amid extreme pressure of official duties, but it was always finished, scholarly, and, above all, human, because Risley was a first-rate field anthropologist, possessing in a remarkable degree the essential qualities of sympathy and tact. We may differ as to the value at the moment of his views on totemism, on hypergamy, on female infanticide—to mention a few of the topics he dealt with—and our differences originate chiefly in the fact that those who came after him have profited so largely by his work and by the developments of scientific modern anthropology. But in our strivings to correct this or that inaccuracy, as they seem to us, we must not forget the greatness of the master or the wide view which he took of the land and its peoples, whom he loved so well. There is totemism, lots of it, in India still. Endogamy is still a social force of great potency in the lives of the peoples of India. True there are currents of motion up and down. There are groups that rise and groups that fall in the complex social scales of that vast continent. The spade may reveal secrets still withheld from us. The deserts of Khotan have guarded treasures for long ages, and the mighty movements of whole peoples, still shrouded in mystery, may yet be made clear to us and to those who come after us. India was likened by Risley to a powerful fortress. We have seen great fortresses fall before persistent siege, to slow sap and mine, be yielded to the fierce onset of ruthless barbarians, and there are many unwritten chapters in the history of India which would tell their tale of frightfulness. The peoples of India are many, and the range of culture stretches from the savagery that spurns clothes and worships it can hardly say what, to complex modern economics and to abstruse intricate philosophic systems. To a man such as Risley—erudite, scholarly, broad in view and liberal in thought—will one day fall the task of surveying the growth of Indian philosophic and religious systems from the tangled mass of crude beliefs so often dubbed Animism. The Indian Civil Service is justly proud of its scholars like Risley, and this book, which contains his best work, enriched and embellished by the accurate and patient notes of his editor, should be part of the library of every Indian civilian.

T. C. H.

Archæology.

Koldewey—Johns.

The Excavations at Babylon. By Robert Koldewey. Translated by Agnes S. Johns. Pp. xix + 335; with 255 Illustrations and Plans. London: Macmillan and Co., 1914. **39**

This work is a careful English translation of Dr. Koldewey's summary account of the German excavations at Babylon, which he published less than three years ago under the title, *Das wieder erstehende Babylon*. The same plates and blocks have been used for the English as for the German edition, though the *format* of the volume has been slightly changed. It must have been a difficult book to render into English, and Mrs. Johns acknowledges the help that had been afforded her by Dr. Güterbock, before the war, in the rendering of technical architectural terms, with

which its pages abound. The dominant note of the volume is, in fact, architectural, reflecting in that respect the chief interest of its author, who was an architect before he was an archaeologist. But this fact has had its compensating advantages, for his early training and sympathies have enabled him to recover and interpret the fragmentary ground-plans of buildings with a certainty and intuition that might otherwise have been lacking. He has consequently laid the foundations for a sound knowledge of Babylonian religious architecture, and has incidentally shown how the conservatism of the race retained several primitive features at a time when considerable advances had been made in secular design. This subject had already been treated in greater detail in his monograph, *Die Tempel von Babylon und Borsippa*, published two years earlier, and the chief novelty of the present work is the fact that it gives a brief but connected account of the architectural results of the excavation on the secular side.

Hitherto this information has been accessible only in the "Mitteilungen" of the *Deutsche Orient-Gesellschaft*, and the connected summary which is here given collects such scattered references and discussions, and illustrates them by means of photographs and ground-plans, many of which appear here for the first time. A good idea can now be obtained of what was achieved in palace-construction and in fortification by builders who had to depend almost entirely on the employment of brick in mass, unrelieved and unassisted by the stone of less alluvial countries. And, in a more technical treatment of the subject, Dr. Koldewey has admirably demonstrated how the disadvantages and dangers of such massive building in a land of water-logged silt were mitigated by the ingenuity of builders during the later period.

On the purely architectural side the book thus contains a good deal of valuable information; but it must be confessed that it is perhaps a little disappointing when viewed from the broader standpoint of the archaeologist, with which we are here mainly concerned. On some subjects the author whets our appetite, without attempting to satisfy it. It is well known, for example, that considerable quantities of pottery have been found in the course of the excavations, and this is borne out by several passages and brief descriptions in the present work. The fabrics were evidently found in several different strata, certain of them (recovered by deep trenching below the later citadel) dating from a comparatively early period. The excavators have thus at their disposal the means for filling out some of the deficiencies in our knowledge of Babylonian ceramics. With their help we should at least be able to construct the outline of a pottery-sequence, and it may be hoped that in the future these important data will be rendered accessible for detailed study.

The need for emphasizing the archaeological side of Mesopotamian excavation, as distinguished from its architectural and linguistic aspects, is particularly apparent at the present moment, in view of the trend of much recent anthropological research. Some attractive but rather sweeping theories of migratory movements, suggested to explain the common diffusion of elements of culture hitherto regarded as of independent origin, need above all to be tested by archaeological facts; and where such are lacking any theory of connexion or borrowing must have the inherent weakness of pure conjecture. Our knowledge of Mesopotamian pottery, for example, had it been equal to that we already possess of Egyptian fabrics, would throw considerable light on the possibilities of Egyptian influence in the Euphrates valley, and the periods at which it may have been exerted. Again, if, as has been suggested, Egyptian processes of mummification passed over to the Far East, and one of the principal routes followed was by way of the Persian Gulf (which had been reached by the Euphrates route from Egypt), it would be natural to look for some traces of their passage in the methods of burial, or at least in the grave furniture, of Babylonia.

On such a point Dr. Koldewey's book might be expected to throw some light, describing as it does the results of fifteen years of work in the country's capital. Here, as in the case of the pottery, we still await the full publication of the rich material recovered.

But some pages are devoted to the graves discovered in the Merkes Mound, and elsewhere the author attempts certain generalisations on the methods of burial. It may be noted that in the material he adduces, the only evidence of Egyptian influence is supplied by certain rudely-formed anthropoid coffins of baked clay. In one passage he suggests that these may belong to the Persian or latest Babylonian period, but a more detailed description of one of them elsewhere in the volume seems to point to a still later date. For this example is described as having been recovered (presumably in an undisturbed burial) in soil above the north-east corner of the ruined Neo-Babylonian citadel, which we know was inhabited throughout the Persian period. Thus no earlier date than the Seleucid era seems probable, at least for this particular coffin. On either date the evidence, so far as it bears upon recent discussions, is wholly of a negative character. But a full and classified publication of the burials is no less to be desired on that account.

We have perhaps dwelt more on subjects which are lightly touched upon in the volume before us, than on the detailed architectural discussions of which it is so largely composed. But in any attempt to appraise the character of Babylonian civilisation, and the extent to which it was itself influenced from without, the former necessarily play a more significant part; and we may confidently express the hope that in future volumes of the scientific series, this side of the excavations will be as fully treated as that concerned with the architectural and topographical problems.

L. W. KING.

Mithraism.

Phythian-Adams.

Religions Ancient and Modern: Mithraism. By W. J. Phythian-Adams, M.A. (Oxon.) Foolscap 8vo., 95 pp. London: Constable & Co., 1915. 1s. net. **40**

The author traces the origin of Mithraism to India at a date long anterior to the separation of the Indian and Iranian races, and its progress thence through Mesopotamia and Persia to Rome and to every corner of the Latin world, where, as is well known, it was at one time a powerful rival to Christianity, to which, in many points, it presented such startling resemblances that Tertullian thought the devil had introduced them into the Mithraic rites with the object of overthrowing and contaminating the truth. A more probable explanation is that both religions had independently borrowed the same things from other sources. The mythology, externals, message, and monuments of Mithraism are duly considered by the author, and the latter are illustrated by four full-page plates.

A. L. L.

ANTHROPOLOGICAL NOTE.

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Ashanti Proverbs. Translated from the Original, with Grammatical and Anthropological Notes, by R. S. Rattray, F.R.G.S., F.R.A.I., District Commissioner, Ashanti. With a Preface by Sir Hugh Clifford, K.C.M.G., Governor, Gold Coast Colony. 9 $\frac{1}{4}$ x 5 $\frac{3}{4}$. 190 pp. Oxford Univ. Press. 8s. 6d. net. (Publishers.)

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SIR WILLIAM TURNER.

ORIGINAL ARTICLES.

Obituary.

With Plate E.

Keith.

Sir William Turner, K.C.B., F.R.S. By A. Keith.

42

Sir William Turner died at Edinburgh on February 15th, aged 84. He was born in Lancaster in 1832, son of an English father and a Scottish mother. His fellow townsman, Richard Owen, had already established his reputation among the scientific men of London; at the time of Turner's birth Owen was 28 years of age, and held the double post of assistant conservator to the Museum of the Royal College of Surgeons and lecturer on zoology at the Medical School of St. Bartholomew's Hospital.

Turner followed in Owen's footsteps: both were apprenticed to local surgeons, both went to St. Bartholomew's Hospital to finish their medical education. During his hospital period (1852-54) Turner became the favourite pupil of Sir James Paget; he made the friendship of his fellow-pupil George Rolleston, afterwards Linaere Professor of Anatomy and Physiology in Oxford, and of a former student of St. Bartholomew's—the late Sir George Murray Humphry, of Cambridge: In 1854, when Turner had become a member of the Royal College of Surgeons of England, John Goodsir, Professor of Anatomy in Edinburgh, paid his friend Paget a visit, and took Turner back with him to act as a demonstrator of anatomy in the University of Edinburgh. At the time of his arrival in Edinburgh anatomists all over Europe were investigating the microscopical structure of the body, and it was as a microscopist that Turner originally applied himself to the progress of our knowledge of the human frame. His earlier researches in Edinburgh were made in partnership with another young Englishman, Joseph Lister. With the publication of the "Origin" in 1859, the nature of Turner's researches immediately changed. Darwin had given a new significance to the structural variations which occur in the human body, and Turner was quick to see their importance as evidence of man's origin. In May 1861 he contributed a paper to the *Edinburgh Medical Journal* on the "Irregularities of the Omo-hyoid Muscle"; in 1862 an important monograph on the "Irregularities of the Pulmonary Artery, Arch of the Aorta, and Primary Branches of the Arch," appeared in the *British and Foreign Medical-Chirurgical Review* (July, October, 1862).

In 1862 we see in his research the influence of another movement. In 1861 Huxley gave his lectures on the "Zoological Relations of Man to Lower Animals," controverting the statement made by Owen that the *hippocampus minor* was a human characteristic. Rolleston and Flower rallied to Huxley's support; Goodsir favoured Owen, but his demonstrator took the opposite side, and published in the *Proceedings of the Royal Society of Edinburgh* (Vol. IV, 1862) an account of the "Anatomical Relations of the Surface of the Tentorium to the Cerebrum and Cerebellum in Man and the Lower Mammals." Another paper which provided Darwin with welcome material in 1865 was entitled, "On Variability in Human Structure, with Illustrations from the flexor muscles of the fingers and toes" (*Trans. Roy. Soc., Edin., Vol. 24*). Papers on the "Malformation of the Organs of Generation" followed in the *Edinburgh Medical Journal* of 1865 and 1866. It was at the same period that he applied himself to the study of craniology. In January 1862, Huxley lectured in the Philosophical Institute of Edinburgh; the substance of these lectures appeared in 1863 as "Man's Place in Nature." There, for the first time, the human calvaria found at Neanderthal in 1857 was subjected to a complete analytical investigation. A survey of the list of anthropological publications, appended to this note, and taken from a list prepared by Sir William Turner in 1910, shows how deeply the cranio-logical problems raised by Huxley had interested him. From a consideration of ancient skulls found abroad, it was a natural sequel that he should turn to those

found in his adopted country. Hence in 1864 there appeared, "Notes on the Characters of a Cranium found in a Short Cyst at Duns" (*Roy. Soc. Anthr., Scot.*, Feb. 1864). For fifty years, by his own personal endeavours, and by help of his numerous and enthusiastic pupils, he gathered in his museum the material on which are based two standard monographs, "A Contribution to the Craniology of the People of Scotland," Part I, Anatomical (*Trans. Roy. Soc., Edin.*, Vol. 40, 1903), and Part II, "Prehistoric, Descriptive, and Ethnological" (*Trans. Roy. Soc., Edin.*, Vol. 51, 1915). Scotland has produced many anatomists and anthropologists, yet it is to two Englishmen that she is mainly indebted for a knowledge of her own sons—the late Dr. John Beddoe and Sir William Turner. Beddoe's "Contribution to the Anthropology of the Scotch People" was published in 1853, the year preceding Turner's arrival in Edinburgh.

In 1865 he began to apply himself to a study of the cranial characters of modern human races. His first contribution is a modest one, "Notice of the Cranium of a Manganya Negro" (*Proc. Roy. Soc., Edin.*, Vol. III, 1865). By means of pupils who had taken up residence in foreign lands he assembled in the Museum of the University—one might justly call it the Goodsir-Turner Museum—the collections which form the basis of his many and varied contributions to physical anthropology—his contribution to the "Craniology of the People of the Empire of India" (1899, 1900, 1906), to the "Craniology of the Natives of Borneo, Formosa, and Tibet" (1907); "Ethnological Enquiries especially connected with the Western Esquimaux" (1873); "The Cranial Characters of the Admiralty Islanders" (1881). The return of H.M.S. "Challenger" brought him the rich collection of specimens on which are based his papers on the Australian aborigines contributed to the "Challenger" Reports, 1884–1886. His important monographs on the "Craniology, Affinities, and Descent of the Aborigines of Tasmania," appeared at a later date, 1908, 1910. Indeed it was during the last twelve years of his life—from his seventy-second until his eighty-fourth year, when he carried out the onerous duties that fall to the Principal of the University of Edinburgh, that he prepared and wrote his most important contributions to physical anthropology. More than any man of his time he helped to build a solid foundation for a scientific knowledge of human races. In his "Challenger" Reports he opened up new lines of investigation—on the lumbar curvature of the human spine, the use of the characters of the pelvis and of the sacrum as race marks. In addresses, and in papers of a more general nature he dealt with the laws and principles of anthropology. In his presidential address to the Anthropological Section of the British Association in 1889, he selected "Heredity" as his subject; when he was again president at Montreal in 1897, he spoke on "Some Distinctive Characters of Human Structure." He made one of the most notable contributions to the discussion which followed the discovery of the remains of *Pithecanthropus Erectus*, by Dr. Eugene Dubois, in Java (1891–94). He arranged and edited the "Scientific Papers and Addresses" of his friend Professor George Rolleston (1874); he collected and edited the invaluable writings of his master and predecessor John Goodsir, whom he succeeded in 1867. He was a founder of the *Journal of Anatomy and Physiology*. Without exaggeration it may be said that Sir William Turner's greatest contribution to anthropology was the pupil who succeeded him in the chair of anatomy in 1903, Professor D. J. Cunningham, whose death in 1909 was a loss of the first magnitude to British anthropology.

Here only one aspect of a many-sided career of a really great man has been touched on. His researches on the structure of the brain and of the placenta, his numerous papers on comparative and human anatomy, his public lectures and addresses, his power as a teacher, his statesmanlike and continuous services to Medicine, to medical men, to learned societies, to public life, and to the prosperity of the

great University over which he presided, and of which he became the chief ornament—all these aspects of his busy life are purposely omitted. His was a robust, outstanding personality, with a sound judgment of men and affairs, with a marvellous capacity for work and for endurance, arriving slowly but certainly at definite decisions, and covering a warm nature and a quiet and keen sense of humour by a manner which was apparently severe and brusque. His life was a continuous series of episodes of enquiry and research. He was born as the Cuvierian epoch was coming to an end; he rose to maturity in the Darwinian period, when he served as a pioneer; he died when the early Darwinian enthusiasm was changing the direction of its efforts and when Europe was in the turmoil of the greatest war. He lived to see his pupils filling many and distinguished chairs at home and abroad. Honours and friendships crowded in upon him, and he deserved them all. He filled the Presidency of the British Association in 1900; he was knighted in 1886 and made a K.C.B. in 1901. All his contributions to science are of a permanent kind; time can only enhance his reputation. He succeeded the greatest of Edinburgh anatomists, John Goodsir, in 1867. In 1903 he resigned the chair of anatomy to become principal of the University which he served faithfully and ably for a period of altogether 62 years.

A. KEITH.

LIST OF THE PRINCIPAL ANTHROPOLOGICAL PAPERS OF SIR WILLIAM TURNER.

1861. "On Irregularities of the Omo-hyoid Muscle, with remarks on their bearings on the Surgical Anatomy of the Muscle." *Edin. Med. Journ.*, May 1861.
1862. "On Irregularities of the Pulmonary Artery, Arch of Aorta, and Primary Branches of the Arch, with an attempt to illustrate their mode of origin by a reference to development." *Brit. and Foreign Med.-Chirurg. Rev.*, July and Oct. 1862.
1862. "On the Anatomical Relations of the Surface of the Tentorium to the Cerebrum and Cerebellum in Man and the Lower Mammals." *Proc. Roy. Soc., Edin.*, Vol. 4, 1862.
1863. "On Cranial Deformities, more especially on the Scapho-cephalic Skull." *Reports Brit. Assoc. Advance. Sci., Newcastle-on-Tyne*, p. 124, 1863.
1863. "Anatomical Characters of a Human Cranium found at Amiens." *Anthr. Rev.*, Vol I; *Reports Bristol Assoc. Advance. Sci., Newcastle-on-Tyne*, 1863.
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1864. "Anatomical Characters of a Human Cranium found at Amiens." *Quart. Journ. Sci.*, April 1864.
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Anthropology.

Parsons.

A Reply to Mr. Pycraft's Plea for a Substitute for the Frankfurt Base-line. By F. G. Parsons, Prof. of Anat., Univ. of Lond.

43

I can fully sympathise with Mr. Pycraft in his dissatisfaction with the Frankfurt base-line; it has all the disadvantages he points out, and yet I fear it is the best means we have at present of orientating a skull.

Our trouble is that there is nothing really constant about the skull; as far as I know, the only thing approaching constancy is that the long axis of the orbit is

horizontal for distant vision, and this position the use of the Frankfort plane approaches more nearly than anything else.

If we adopt Mr. Pycraft's alternative nasio-meatal line we shall not have attained any constancy, because the meatus is a variable point and has no constant

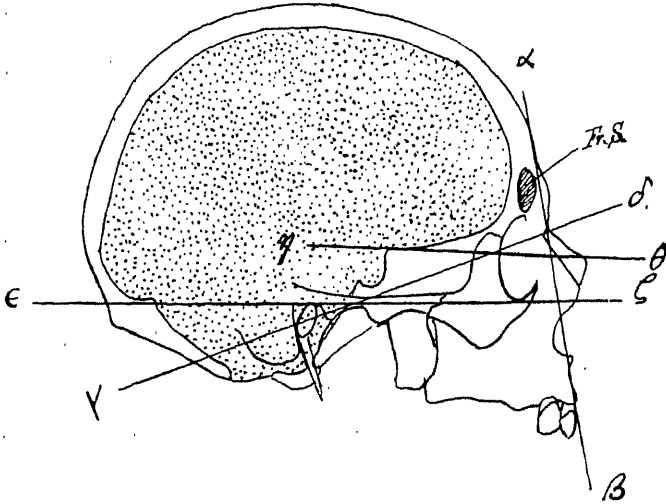


FIG. 1.—SKULL OF EUROPEAN.

relation to the base of the skull, while the nasion moves forward and backward with the development of the frontal sinuses. For purposes of orientation the nasio-meatal line would be of very little use, because the face is tilted down so much that, in the norma facialis, the shape of the orbits and nasal aperture are unrecognisable, while the norma verticalis is viewed from above and behind, and its shape is

quite different from that seen when it is looked at directly from above.

The Frankfort plane at least enables us to obtain a direct instead of an oblique view of the top, front, and back of the skull, and the substitution of another plane would make a great deal of recent craniometrical work valueless for comparison.

With regard to the facial angle, we must first clearly define what we want to record by it.

I should like it to tell me how far the face has departed from the anthropoid condition, in which it is in front of, rather than below, the brain case. When I say "in front," I assume, of course, and I think anyone would understand, that the head is in the position for distant vision which the Frankfort plane reproduces more or less successfully.

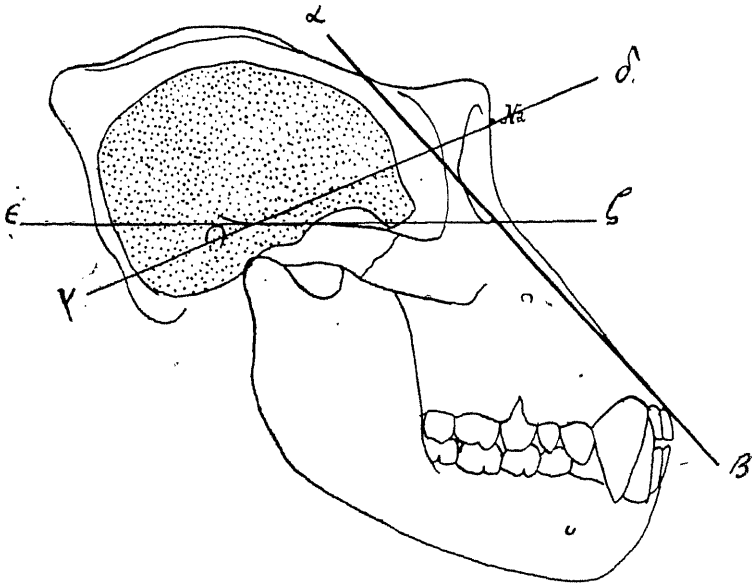


FIG. 2.—SKULL OF GORILLA.

I should take a plane ($\alpha \beta$) from the most anterior part of the true brain case, *i.e.*, the frontal eminence (*see* Fig. 1), and determine its inclination to the horizon, which is represented in Fig. 1 by $\gamma \theta$, the long axis of the middle of the orbit, and it will be noticed how nearly parallel this line is to the Frankfort plane $\epsilon \zeta$.

In Figs. 1 and 2, the brain-containing area (dotted) has been ascertained by superimposing two dioptrographic tracings, one of a sagittal section of the skull, the other of the norma lateralis. A glance at the nasion in the European and Gorilla will show how obviously dependent it is on the development of the frontal air sinuses and how far away in Fig. 2 it is from the brain-containing part of the skull.

If we were to use Mr. Pycraft's new angle we should not be doing justice to the real prognathism of this skull, if by prognathism we mean the projection of the jaws in front of the brain case, because the frontal sinuses have pushed the nasion far in front of the brain case, and we are now introducing a new factor, the size of the frontal air sinuses, into our record of prognathism.

In Fig. 1 the line $\alpha \beta$ cuts the nasion, but it does not do so in skulls of a lower human type.

It will be seen in both figures that the nasio-meatal line $\gamma \delta$ corresponds very loosely with the cranial base.

As I have said, everything depends on what one means an index or angle to convey.

If Mr. Pycraft wants to record the angle which the face makes with the base of the skull, his meato-nasial line is very useful, except that he is obscuring his record by also recording the development of the frontal sinuses.

If, on the other hand, one would record the relation of the jaws to the most anterior part of the brain case, *i.e.*, the frontal eminence, the method I suggest seems preferable. Neither is ideal, and we are under a debt of gratitude to Mr. Pycraft for pointing out the defects in our methods and for opening a discussion on this very difficult and rather unsatisfactory question of cranial measurements.

F. G. PARSONS.

Archæology.

Western Australian Stone Implements. By L. Glauert, F.G.S.,
F.R.A.I., Keeper of Ethnology, Western Australian Museum, Perth, W.A. **44**

The remarks of Dr. R. Hamlyn Harris upon the "stone tools housed in the Queensland Museum" (MAN, 1915, 95) has re-directed my attention to Miss A. C. Breton's summary published earlier in the year (MAN, 1915, 25).

As far as Western Australia is concerned, Miss Breton's references by their brevity are apt to create a false impression. The Western Australian Museum in Perth has a large gallery devoted exclusively to Australian ethnology, and in it due prominence is given to Australian stone implements of every kind, although Western Australian objects only are referred to in these notes.

STONE SPEAR HEADS.

The serrated stone spear head is essentially a Western Australian product, its manufacture being restricted to the Kimberley district. Professor Baldwin Spencer records the article from various localities in the Northern Territory, and this museum possesses specimens from the South Alligator River, Arnhem Land, N.T., Lake Disappointment, W.A. (120° E. and 23° S.), and other localities whither the articles had travelled as a result of barter.

The exhibited series of specimens number about one hundred, and include finished heads made of quartz, quartzites, and basalt, in addition to several series prepared to illustrate the method and stages of manufacture. Specimens in the collection dug up at Lambo Station, near Hall's Creek, E. Kimberley, suggest that the early type was coarsely serrated and that the remarkably fine work is a modern development. All varieties known to me are represented except the one described by King, and figured in the *British Museum Handbook to the Ethnographical Collection*, Plate V, Fig. 2.

Serrated spear heads of glass, porcelain, insulators, and earthenware, are also shown, though their interest, like that of the iron and steel implements, is not as strictly scientific.

HAFTED STONE KNIVES.

Two specimens only are in the collection; the blades are triangular in section, and the hafts are made of resin; one is exhibited in its original "paper-bark" sheath. These knives are said to have been obtained in Kimberley; they are probably the work of Northern Territory aborigines.

STONE FLAKES AND SCRAPERS.

A very varied series of 35 specimens contains forms that range from simple flakes to carefully-worked scrapers. The materials are quartz, quartzite, jasper, basalt, etc.

In addition there are some beautifully-worked implements from Kimberley, and the Murchison used for performing the operations of "circumcision" and "subincision." These objects are flat flakes that have, as a rule, been carefully trimmed till their outline has become roughly circular or elliptical; other examples are crude, but equally serviceable.

STONE GOUGES AND PYGMY FLINTS.

Forty-two specimens, mostly from Mills Stream Station, 80 miles south-west of Roeburne, include typical gouges of the types affixed to spear throwers and throwing clubs (*dowarks*), and other implements remarkably like the famous pygmy flints. These have already been mentioned by Mr. J. P. Johnson (*MAN*, 1914, 75). It may be of interest to add that the use of these objects is unknown to the aborigines now living in the district.

STONE AXES (TOMAHAWKS).

The ten hafted examples include three of the rear type formerly made by the natives of S.W. Australia. These consist essentially of a mass of blackboy-gum, into which are fixed two chips of stone, the one forming the cutting edge and the other the hammer; a strong pointed stick forms the handle. The other seven axes are of the usual Australian type with withe handle, etc.

A number of finished axe-heads and a series of specimens illustrating the method and stages of manufacture are also exhibited.

MILLING STONES, HAMMER STONES, AND POUNDERS.

Stone mills from all parts of the State are exhibited. The complete sets are generally of granite, but quartzite and diorite upper stones are often used in conjunction with granite mills.

Hammer stones, rubbers, and pounders of diorite, and occasionally of granite, are not rare in the south-west of the State, where they are often found by the settlers. Many of them are pitted or grooved, presumably for convenience in holding.

The above notes refer exclusively to Western Australian specimens on view in the gallery at the time of Miss Breton's visit. Implements in the reserve collection or acquired since August 1914, are not considered.

L. GLAUERT.

REVIEWS.

North America.

Moorehead.

The American Indian in the United States: the Present Condition of the American Indian; his Political History and other Topics, a Plea for Justice. 45
By Warren K. Moorehead, A.M. Andover, Mass. 1914, The Andover Press, pp. 440.

Mr. Moorehead's book is the first of a series he is preparing which will deal comprehensively with the Indians of the United States. In this volume he deals

only with the Indian of to-day and his history in contact with civilisation during the last fifty years. Though not without hope for the future, it is by no means pleasant reading. The history, for instance, of the treatment of the Indians in the matter of land-tenure or of the Indian wars, though written without any attempt to heighten the colour of the picture, is a grave indictment of the methods by which the Indian problem has been handled. E. N. F.

South America.

Whiffen.

The North-West Amazons: Notes of some Months spent among Cannibal Tribes. By Thomas Whiffen, F.R.G.S., F.R.A.I. (Captain, h.p., 14th Hussars). Constable, 1915. **46**

This excellent work will be very welcome to anthropologists. It treats of the tribes between the Putumayu and Japura, Columbian tributaries of the Amazon, chiefly of two tribes, the Boros and Huitotos, dwelling near the head-waters of those rivers, and isolated from the corruption of so-called civilisation. Few travellers had visited or been near these tribes before Captain Whiffen's long visit of several months. We have the writings of Crevaux, Koch Grünberg, Hardenburg, Hamilton Rice, Simson, and Robuchon, who were all among or near the Indians of the Japura and Putumayu, and we have the Putumayu Blue Book; but none have collected information respecting these interesting tribes with such ability, intelligence, and perseverance as our author.

Captain Whiffen commenced his researches with a persevering effort to ascertain the fate of the unfortunate but almost equally persevering traveller, Eugene Robuchon, and he received the thanks of the French Government for his attempt. He then set to work with a methodical study of these little known tribes. One is struck with the thoroughness and perseverance with which he has performed his task, and with the care with which he strove to inform himself of all that has been previously written on the subject.

The arrangement of his material leaves nothing to be desired. He first introduces the reader to the country, its rivers, and its dense vegetation, well describing some of the palms, although he disclaims any authority as a botanist. He describes this density, and the feelings to which it gives rise, the silence of the forest, and the sense of loneliness, in a masterly way; and then enters upon his study of the inhabitants, commencing with an account of their homesteads and daily life. A very interesting chapter follows on classification of groups and tribes, inter-tribal strife and its causes, and tribal organisation. Then follow chapters containing full information respecting every detail of the lives of these isolated tribes, including their myths, supernatural beliefs, and languages, with vocabularies and poetry, as well as their cannibalism. But this practice is only a ceremonial observance and not real cannibalism, which is the habitual practice of using human flesh for food.

Captain Whiffen's conclusion is that the natives of this region were a neolithic people originally, agricultural but not yet pastoral, and that such they have remained throughout the centuries. His conclusion appears to be based on a careful study of their condition as he found it. But to complete the material for forming such a conclusion he has not gone back to the records of the sixteenth century. The records of the explorers who were employed by the Velser Company of Venezuela at least require consideration. It was in about 1536 that George of Spires resolved to solve the mystery which enveloped these unknown regions. The story of his march is most interesting. His farthest point was the River Japura according to Humboldt, or the Guaviare as Colonel Acosta assumed.

Another important expedition was led by Philip von Hutten, a relation of the Velsers of Augsburg, who had served with George of Spires. In the winter of

1541 he had penetrated far beyond his predecessor, and heard of a city called Macatoa. He actually reached this settlement on the Japura, and found it to consist of streets of huts with open spaces at intervals inhabited by Uaupes Indians. Still advancing, he came to the region between the Guaviare and Japura, and in sight of another large and populous town, said to belong to the chief of the Omaguas. The so-called town must have been a well inhabited district with many huts. Here the Spaniards were defeated by the Omaguas and forced to retreat, von Hutten being wounded. The Omaguas were more advanced in civilisation than any other Amazonian tribe, and their territory once extended to the head-waters of the Japura. Now they are reduced to a small number of families, and it is uncertain what relation the present tribes on the Upper Japura and Putumayu bore to them in the sixteenth century. But the stories of the explorers of the Velser Company should be studied before any final conclusion can be reached respecting the ancient condition of the existing tribes in this region. The story of the expeditions under the Velser Company will be found in Castellanos, Simon, Piedrahita, Herrera, and Oviedo y Baños. The discovery of the whole course of the Amazons by Orellana took place just before the expedition of Philip von Hutten.

These evidences will, we hope, be considered by Captain Whiffen before he comes to any final conclusion respecting the origin or former condition of the tribes he has studied with such care and with such valuable as well as interesting results. His book is a model of what a work on primitive races should be, and how the subject should be treated. The results of most careful, persevering, and judicious studies on the spot have been put together and presented to the reader with quite unusual ability and skill.

CLEMENTS R. MARKHAM

Honolulu Folklore.

Westervelt.

Legends of Old Honolulu. Collected and translated from the Hawaiian by W. D. Westervelt. Boston, Geo. H. Ellis Co.; London, Constable and Co., Ltd., 1915. **47**

The beautiful island on which Honolulu, the capital of the islands we call the Sandwich Islands, but called by the Americans by the collective name of Hawaii from the name of the largest of the group, stands, is composed of two ranges of volcanic hills separated by a wide valley. Honolulu itself is situated on the south side of the island, near the eastern end of a wide bay, looking towards the west; and whether the name mean "sheltered hollow" or "abundance of peace," it is at the present day equally justified. Almost every spot about it has been celebrated in the ancient traditions of the deeds of gods and men. These traditions Mr. Westervelt has set himself to collect, and has printed them in several Hawaiian periodicals, and reprinted them here.

At the time of the discovery of these islands they were inhabited by a branch of the Polynesian race, a gifted people, but voluptuous, restless, and cruel. The origin of the race is still to seek. The author is an adherent of the theory of Judge Fornander, who held that the people were Aryans from India or Arabia. This would take much proving to bring conviction; and nothing that has yet been offered as evidence approaches the point of proof. On the other hand, there is little doubt of a very large Malay element, whatever its relation to the other components of the race. The subject requires very careful research at the hands of a well-equipped anthropologist: it cannot be decided offhand by the authority of Fornander, or by any superficial observations. Only a student with the perseverance, the minute care for details, and the skill and tact to perceive and follow up every possible clue, such as Dr. Rivers possesses, can successfully investigate the problem.

Meanwhile to assume that any of these legends are to be trusted as history

is to lean on a broken reed. Not one of them can be accepted without rigorous examination. Many of those here given are variations on world-wide themes. We are familiar elsewhere with the incidents of water obtained by striking the rock (p. 35), the appeasing of monster guards (p. 42), the water of life (p. 38), the clever thief (p. 148), the child born from an egg (p. 205), and so on. The stories are on the whole well told. How closely they render the originals is another question, on which we have no means to form an opinion, save the fact that most of them are reprints from more or less "popular" journals. On p. 108 more than a page has been by accident omitted before the paragraph beginning "They began their watch." It has been misplaced, beginning on p. 109, line 3, and ending on p. 110, line 5.

Many of the illustrations from photographs are clear though small; but however well they reproduce individual scenes they cannot give any idea of the exquisite verdure and "atmosphere" of that happy climate, where the sun is always shining and the softest showers for ever fill the land with blossom and with fruit.

E. SIDNEY HARTLAND.

Mexico.

Salazar.

Crónica de la Nueva España. By Dr. F. Cervantes de Salazar. Pp. xxiv + 483. Madrid: The Hispanic Society of America. 1914.

The Hispanic Society of America has done a good work in publishing with care and accuracy and distributing freely this important history of the conquest of Mexico, long missing, and discovered in the manuscript department of the Biblioteca Nacional at Madrid, by Mrs. Zelia Nuttall in the spring of 1912.

The learned Dr. Cervantes de Salazar was secretary to the Archbishop of Seville, and professor of rhetoric in the university of Madrid, where he had known Hernan Cortes, before proceeding to Mexico in 1551. There he was professor of rhetoric, and later Rector of the University. He was appointed chronicler of the city in 1560 and died there in 1571. Knowing many of the *conquistadores* still living there (some of whom had written accounts which he consulted), he was in possession of all the facts relating to the conquest, and had a knowledge of personalities and localities that makes his narrative most spirited and lifelike. The book reads almost like a translation of Prescott, without his errors, and is most valuable as the result of a balanced judgment, written sufficiently long after the events described to view them clearly and without prejudices. Herrera, a later historian, had the manuscript and used it freely for his own work, transcribing whole chapters, whilst Salazar quotes a good deal from Motolinia and from Cortes' letters, so that there is not much that is actually new. But he marshals his details well, adding much, and confirms previous accounts of the civilization of Mexico which some modern writers have tried to belittle.

The chronicler begins with an account of the country and its productions, the inhabitants and their customs. He says of the towns that, unlike those of other countries, they were not placed near the sea or rivers, but in high and rugged situations, difficult to reach and easy to defend. Each house was surrounded by its own plot of sown land, and a town of 1,000 householders would cover four leagues. Dwellings were kept apart, so that during an epidemic the infection might not spread. The Spanish friars induced the people, with great difficulty, to come together into towns of closely built streets, where they could be more easily supervised. Treating of the character of the Mexicans (Aztecs), Salazar says: "they were the worst of any Indians and always had been as they came with tyranny and forcibly took all that the native Otomi possessed." At the same time, there were among them men of great judgment and capacity, and the large dominion was

kept in good condition. Crimes were severely punished, all lived in peace and honesty, and their prince was revered.

Six languages were in use at Tacuba (a suburb of Mexico): Mexican, Otomí, Guata, Mazaua, Chuchumé, and Chichimeca, but Mexican (Nahua) was the general medium of communication. "As in Latin and Spanish, some speak in a more cultivated way than others and Mexican and Tarasco give most scope for variety of expressions. Mexican is more suited to women than any other tongue." This would be from the many graceful turns and degrees of flattering courtesy that it permits.

Describing the doctors and wizards (p. 40), Salazar mentions that the latter could change themselves into animals, especially the tiger (*F. onca*) and leon (*F. concolor*). A leon, trying to carry off a boy, was wounded by a Spaniard, who next day found the local wizard wounded in the same part. A century later the Dominican Gage describes instances known to himself in Guatemala of such animal changes, and they still occurred twenty years ago in the State of Guerrero, in popular belief.

The age of marriage was "from 25 years old and upwards, because it was found that if married younger, they and their children were of little use for hard work, and strength was needed for portage, as was the custom. The elder men say the people lived longer then and had less sickness than now." There was one principal, legitimate wife, and many other women, who were employed chiefly in weaving and making the garments which were part of the heavy tribute exacted from all. Olintetl, lord of Zacatami (between Zacapoaxtla and Texiutlan, near the town of Tlatlahuqui) had 30 wives, all in one large house, with more than a hundred other women to serve them, and he had 30,000 vassals.

The conditions of service (p. 296) varied. There was an infinity of cultivators who contributed with their persons and possessions, either renting land from others and paying tribute in addition to the rent, or farming their inherited property and giving to Motezuma one third of the produce. The tenant class was worst off, was much oppressed by the tax gatherers, and could only live in the poorest fashion. The nobles and lords were expected to spend their revenues chiefly at the Court, and in case of war to bring large bodies of retainers.

The great markets of the city of Mexico are described from the author's own knowledge, with their vast concourse of people which he dared not enumerate as no one would believe who had not seen it. Like other writers he dwells on the exquisite feather-work, such as portraits better than any paintings, or imitations of birds and flowers on which the workers would spend whole days without pausing, so absorbed were they in placing each small feather perfectly. The goldsmith's work was the marvel of the best Spanish goldsmiths, who could not understand how they accomplished such things as a fish with scales alternately of gold and silver, or a parrot that could move its head, wings, and tongue.

Cortes's remarkable character is well shown throughout the story of the conquest—his diplomatic tact, dissimulation, power of physical endurance, attention to details, indomitable perseverance, fine judgment, curious mixture of religion and greed of gold, capacity for bluff, for controlling his men and for saying the right thing at critical moments—all the qualities needful for such an enterprise were his.

The chronicle gives the whole story of the conquest until after the siege of Mexico, but is unfinished, ending with the heading of a chapter. Indexes of the names of persons and places (which vary so often in writings of that period), and a careful introduction by M. Magallón, add to the value of this most interesting work. It is to be hoped that an adequate translation into English may be made.

A. C. BRETON.

Sociology : Religion.**Durkheim.***The Elementary Forms of the Religious Life: a Study in Religious Sociology.*By Émile Durkheim. Translated from the French by Joseph Ward Swain, M.A.,
London: George Allen and Unwin, Ltd., N.D. (1915). 15s. net.**49**

Professor Durkheim's important work on *Les Formes Élémentaires de la Vie Religieuse: Le Système Totémique en Australia*, was reviewed in these pages in June 1913. The present volume is a translation, which, so far as I have tested it, is accurate and idiomatic. It gives an admirable notion of the distinguished author's clarity of diction and logical sequence of thought; and it ought to result in making the book more widely known in this country. Concerning the work itself I have nothing to add to what I have already said in the review above mentioned and in *Ritual and Belief* (Williams and Norgate, 1914). E. SIDNEY HARTLAND.

Archæology : Palæolithic Art.**Sollas.***Ancient Hunters and their Modern Representatives.* By W. J. Sollas,
D.Sc., LL.D., F.R.S., etc. London: Macmillan & Co. 1915. Pp. xxiv + 591.
Figs. 314.**50**

The first edition of Professor Sollas' book, *Ancient Hunters*, was reviewed in MAN, 1912, 109, by the present writer. In the preface Professor Sollas expresses regret that the first edition was so soon exhausted. Prehistorians, on the contrary, will find it a matter for satisfaction that a new and enlarged edition of this indispensable work has been forthcoming so soon. It must undoubtedly have occasioned much labour to the author, but we may be sure that this has been a "labour of love," and not an irksome task, or the subject would not be presented to us with such charm.

The magnitude and importance of the additions which have been made in the second edition can best be understood by stating that the pages have increased from 416 to 591, and the figures from 235 to 314.

Among the new points, one may note that, on the controversy which has arisen with regard to the restoration of *Eoanthropus*, Professor Sollas supports Dr. Smith Woodward's reading of the evidence.

On the subject of the eoliths, Professor Sollas continues to lend his powerful support to the sceptical side. But he selects two examples of the "rostro-carinates," with certain other flints (which are not described in detail) from the mid-glacial sands of Ipswich as the types of a problematical "Anglian" industry at the base of the Palæolithic series. The page-and-a-quarter devoted to the subject seem a little inadequate for the establishment of a new industry of such dramatic import, especially as it implies an apparent inconsistency with our author's attitude towards the "rostro-carinates" in general.

In the first edition Professor Sollas held that the Mesvinian was the oldest-known human industry, but in the present edition our author (following Professor Commont) comes to the conclusion that this was based upon an error of determination in the dating of the overlying industries, and that the Mesvinian flakes are certainly not older than Upper Acheulian. The present writer drew attention to this error in 1905 (*Journ. Anthr. Inst.*, Vol. xxxv, p. 341, footnote), but did not venture to go so far as Professor Commont has done.

Such occasional errors of determination do not discredit the established succession of the Palæolithic industries. The mass of evidence so ably brought together by Professor Sollas should convince even the most sceptical of the reality of the Palæolithic evolution.

There is little doubt that it is the instability of the nomenclature which has largely caused the subject to appear confused to the onlooker. The singularly

unhappy change in the application of the term "Acheulian" is a notable instance. The Aurignacian, too, has during the last ten years absorbed much that was formerly called Lower Solutrian. Such changes are necessarily somewhat confusing.

In the previous review considerable doubt was expressed about the supposed Aurignacian date of the Cave frescoes. Many of these are referred to the Magdalenian epoch in the new edition.

Ancient Hunters is not only a very full and up-to-date compendium of the continental evidences, but, as already said, the subject is made fascinating by the manner—most admirable in every way—in which it is presented.

S. HAZZLEDINE WARREN.

ANTHROPOLOGICAL NOTE.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

(Donor indicated in parentheses.)

The Gravels of East Anglia. By T. McKenny Hughes, F.R.S. Cambridge University Press. 1s. net. (Publishers.)

51

Catalogue of Prehistoric Antiquities from Adichanallur and Perumbair. By Alexander Rea, F.S.A. $9\frac{3}{4} \times 6$. 49 pp. 13 Plates. 2s. 3d. (Superintendent, Govt. Press, Madras.)

The Foote Collection of Indian Prehistoric and Protohistoric Antiquities, Catalogue Raisonné. By Robert Bruce Foote, F.G.S., F.R.A.I., M.V.I. 262 pp. 3s. (Superintendent, Govt. Press, Madras.)

Notes on the Fenland. By T. McKenny Hughes, F.R.S. With a Description of the Sheppea Man. By A. Macalister. Cambridge University Press. 6d. net. (Publishers.)

Legends of Gods and Ghosts (Hawaiian Mythology). Collected and Translated from the Hawaiian. By W. D. Westervelt. $7\frac{1}{2} \times 5$. 263 pp. Illustrations in Colour. Constable and Co., Ltd. 7s. 6d. net. (Publishers.)

The Language Families of Africa. By A. Werner. $7\frac{1}{2} \times 5$. 149 pp. and Map. S.P.C.K. 3s. 6d. net. (The Publishers.)

The Tribes and Castes of the Central Provinces of India. By R. V. Russell, I.C.S., assisted by Rai Bahadur Hira Lal. 4 Vols. $8\frac{1}{2} \times 5\frac{1}{2}$. xx + 417 pp.; 540 pp.; 589 pp.; 608 pp. 3 Maps. 127 Illustrations. Macmillan and Co. 42s. net. (The Chief Commissioner, Central Provinces.)

Fryer's East India and Persia. Vol. III. 9×6 . 233 pp. Hakluyt Society (W. Crooke, Esq.)

Neolithic Dewponds and Cattleways. By A. J. Hubbard, M.D., and G. Hubbard, F.S.A., F.R.I.B.A. 3rd edition. $10\frac{1}{4} \times 7\frac{1}{4}$. Illustrated. Longmans, Green and Co. 4s. 6d. net. (The Publishers.)

The British Dominions Year Book, 1916. Edited by E. Salmon and J. Worsfold. 333 pp. Illustrated. (British Dominions General Insurance.)

A Bornu Almanac for the Year A.D. 1916 (=A.H. 1334 and part of 1335). By P. A. Benton. $7\frac{1}{4} \times 4\frac{3}{4}$. 119 pp. 2s. 6d. net. (Humphry Milford.)

La Pileta A. Benáojan. (Malaga.) (Espagne.) Par l'Abbé H. Breuil, le Dr. H. Obermaier et le Colonel Willoughby Verner. $14\frac{1}{4} \times 11$. 62 pp. Plan. 22 Plates. 26 Illustrations in text. Imprimerie Artistique. Vve. A. Chêne. (L'Institut de Paléontologie Humaine.)

Loan Exhibition of Antiquities, Coronation Durbar, 1911. An Illustrated Selection of the Principal Exhibits. $13\frac{1}{4} \times 10$. 164 pp. 74 Plates. Archaeological Survey of India. 30s. (Superintendent Govt. Printing, India.)



SOME CAIRENE PERSONAL AMULETS.

ORIGINAL ARTICLES.

Egypt: Folklore.

With Plate F.

Hildburgh.

Notes on some Cairene Personal Amulets. By W. L. Hildburgh.

52

In MAN, 1915, 102, I described a number of personal amulets, in use at Cairo, dependent primarily for their supposed virtues upon qualities inherent in the materials of which they are composed. The objects shown on the plate accompanying the present article are, for the most part, in contradistinction to those amulets, dependent for their supposed virtues primarily upon qualities which have been imparted to them by artificial means. While a number of the specimens of the present plate are of silver, to the use of which, as I have indicated (*loc. cit.*) preservative virtues are attributed, the employment of those objects as amulets is, I think, probably due more to the forms into which the silver has been wrought than to the use of the metal. The specimens have been selected from the same series as those previously described, and my information regarding them was obtained from the same, or from similar, informants.

Fig. 1.—Silver brooch, in the form of a kind of merman, a male of a sort of sea-creature, half human, half fish-shaped, which may be of either sex. This creature raises its body partially out of the water and calls out as if for help, then draws beneath the surface people who are foolish enough to approach and to try to assist it. Its likeness is quite commonly represented in or upon personal ornaments, which then are, in most (perhaps all) of the examples I have observed, of silver, with the intention of repelling the attacks of evil-working supernatural beings. Such ornaments are, I have been told, generally to be worn by women or children; occasionally, but comparatively rarely, by men. They were said to be used by women especially during illness, and (according to one informant) more particularly during pregnancy (*i.e.*, at a time when a woman is believed to be peculiarly susceptible to malevolent attacks). As I have already pointed out (*loc. cit.*), a number of close, sometimes complete, similarities exist between some modern Cairene amulets and some amulets still, or until recently, in use among European peoples having a Latin culture. It is, therefore, not strange to find the fish-like creatures of the Cairene amulets having their close counterparts in the siren-formed ornaments of Italy* and the *sirenes* (including triton-shaped ornaments) of Spain†, employed as preservative against the evil eye. The creature of the present specimen has, it may be observed, a splendid moustache and a peculiarly modern-looking coiffure, while the upper part of his body appears to be clothed in a jacket of eastern type; the position of his left arm and hand is reminiscent of that of the corresponding members of the comb-bearing European sirens, although it may possibly be due to (or have been modified by) the belief in an image of the hand as a warder-off of evil.

Fig. 2.—Silver pendant; an upward-pointing crescent to which seven pendant bells (compare MAN, 1915, 102, p. 177) are attached. On one side is an unclothed female creature of the kind described above, while on the reverse are engraved "Bismillah" and "Allah [? is the Lord]."

Fig. 3.—Silver gilt downward-pointing crescent, engraved on one face with a pair of semi-human (?) sea-creatures and with names of God, and on the reverse with inscriptions in honour of God.

Fig. 4.—Small soapstone fish, with a hole for suspension. An image of a fish is a favourite Cairene protection against the evil eye.

* See F. T. Elworthy, *The Evil Eye*, pp. 356 *seqq.*, and G. Bellucci, *Catalogo Descrittivo, Amuleti Italiani*, Perugia, 1898, Tablet XII, for some notes on these.

† See my "Notes" and "Further Notes" on "Spanish Amulets," in *Folk-Lore*, Vol. XVII, p. 462, and Vol. XXIV, p. 71.

Fig. 5.—Conventionalized fish, formed of a rich blue glassy material, pierced with five holes. (Another similar object, obtained with this one, has four holes.) Objects made of this material,* of various forms (some of which are described below), generally roughly shaped and seemingly always pierced with a series of holes, are very favourite and common children's protections, at Cairo, against the evil eye; they may be worn by the child suspended from the hair, attached to the cap, on cords with other amulets, or in some other way. Generally, but not invariably, they are worn without metal mountings.

Fig. 6.—Six-pointed object, formed of the blue glassy material, with four holes. The object seems to represent the double-triangle (sometimes known in Europe as the Seal of Solomon), a protective design very commonly to be found represented in or upon Mohammedan amulets and objects needing to be guarded, although the positions of the holes (excepting the central one) do not correspond to the divisions formed by the crossings of the edges of the triangles.

Fig. 7.—Circular object, of a blue glassy material (or of blue-glazed pottery), with seven holes, mounted as a pendant in a silver frame with five small dependent objects. The disposition of the holes in this specimen suggests that its form is a conventionalized derivation of the double-triangle noted under Fig. 6.

Fig. 8.—Circular object resembling a wheel, of the blue glassy material, with seven holes. Its form suggests that it may possibly represent a further step in conventionalized objects derived from the double-triangle.

Fig. 9.—Open hand, of the blue glassy material, pierced with four holes. Images of an open hand are very commonly used, at Cairo, for protection against the evil eye, both as personal and as house amulets.

Fig. 10.—Open hand, similar to that of Fig. 9, but having five holes.

Fig. 11.—Flat silver hand (with a finger in the place of the thumb), with outspread fingers, inscribed "Allah." Formerly a part of a personal ornament, and having small dependent objects attached to three of the fingers.

Fig. 12.—Small pendant of carnelian, in the form of a highly-conventionalized open hand.

Fig. 13.—Small pendant open hand, of a greyish soft stone.

Fig. 14.—White metal arm with open hand, arranged for suspension; in form it is very similar to large wooden amulets placed on house-fronts. Although it resembles, and possibly was originally made to serve as, a Christian votive offering, it was described to me, and not improbably was used, as an amulet against the evil eye.

Fig. 15.—Silver pendant in form of a pointed loop, with a small dependent bell within it, and five similar bells suspended from its lower edge. To be worn by a child as a protection against evil supernatural beings. Although I was given to understand that its protective value lay in the silver of which it is made, I am inclined to believe that that value lies largely in the sound produced by the little bells, and perhaps, to a certain extent, in the form of the loop, a form which may, I think, possibly have phallic associations.

Fig. 16.—Silver pendant, similar in type and purpose to that of Fig. 15, but having a ring in the place of the pointed loop. Several of the small bells are missing.

Fig. 17.—Silver gilt head ornament, pierced in such a manner as to show the word "Ma'shallah." Said to be worn for relief against headache.

Fig. 18.—Silver pendant having a form somewhat resembling that of an arrow-head; in the upper half is an opening seemingly prepared to receive a piece of

* This material greatly resembles the glaze applied by the ancient Egyptians to some of their ceramic objects, including many amulets.

stone; on either face of the pointed part is the word "Allah." Seven small tinkling objects are hung from the triangular part, and one is within the circular opening behind the place for the stone. The pendant is formed of pieces of sheet metal, and, being hollow, perhaps may enclose some protective object or inscribed paper. The form of the specimen, one frequently found in Cairene amulets, has, I was told, a protective value.

Fig. 19.—Ornament formed of a dark reddish glass; of foreign manufacture. Said (by a native dealer in imported goods) to be a favourite amulet, among the Bedouins, for the relief of troubles affecting the throat. Since similarly-shaped ornaments made of glasses of other colours were said to have similar properties, I think that possibly the form of the object, causing it to resemble somewhat a section of the throat, has led to its selection for the purpose mentioned.

Fig. 20.—Charm against colds, commonly used, principally for children, among the Bedouin villagers near Cairo. It consists of a piece of the leaf of a palm "which has been planted by a man who has died and whose property is in his children's hands," cut before sunrise and (in order to secure the best results) preferably on a Saturday, inscribed with certain formulæ (partly magical, partly from the Koran, I was told), and then folded so that it may be carried easily. When in use, it is hung from the patient's neck, generally protected by a wrapping of some kind.

ADDENDUM.

Figs. 21A and 21B.—Pair of stones, said to be used to make love-potions. One stone is a piece of thick, dark greenish slate; the other is a thick, flat, roughly elliptical piece of the black stone used as a touchstone at Cairo. Similar pairs having the properties of this pair were said to be rather rare. According to the informant from whom the stones were obtained, and in whose family they were said to have been preserved for several generations, the black stone was to be rubbed, within water, in the hollow of the slate, in order to cause the water to acquire the virtue of producing a state of love in a person swallowing it. My informant could give me no further details as to the method of employment of the stones, nor any reason for their supposed properties; he seemed to regard their use as a business for women, and to be trying to give the impression that he himself knew too much to believe in such things.

W. L. HILDBURGH.

East Africa.

Fenwick.

Note on some Nandi Remedies. By Norman P. Fenwick.

53

The Nandi make use of portions of many trees, shrubs, herbs, &c. as medicines. Some of these medicines are as follows:—

Headache.—Some bark of a tree named tendwet is boiled in water after having been shredded and well pounded. The decoction is then given to the sick person to drink.

Pains in the Heart.—The patient is given a piece of the root of menjeiyuet to chew and spit out (but not to swallow) while drinking a decoction of tendwet bark prepared as for cure of headache.

Blackwater Fever.—A large quantity of cheroliet root is scraped and boiled in water for two or three hours together with a small quantity of well shredded seyet bark. Natomiet root is taken, scraped, and kneaded in cold water. It is mixed then with the decoction of seyet and cheroliet and with milk from which all the cream has been removed, and is then given to the patient.

The immediate result is violent vomiting and purging.

Constipation.—A small piece of the root of kapkarasiet is chewed.

Worms of any Species.—Usuet root is dried in the fire and the bark peeled off it.

Boñgoniet berries are dried, ground fine, and then eaten together with the usuet.

As a substitute for boñgoniet berries may be used berries of sagatetek prepared in a similar manner, or sikumariet root, which is roasted in the fire.

Snakebite.—A piece of the hard inner bark of ikomiet, taken from the base of the trunk, is scraped into a powder, and chiberenet root is pounded and boiled for a long while.

A little of the powder of ikomiet bark is rubbed into the wound and some is chewed together with fresh chiberenet leaves and spat out. Next, the decoction of chiberenet root is drunk and more of the powder is beaten up with an egg and swallowed.

To complete the cure the sufferer must have sexual intercourse with a woman at once.

Gonorrhœa.—Root of senetwet is cleaned, beaten, and boiled for an hour together with lameiyuet bark which has been shredded. Lapotuet root is cleaned, beaten, and boiled and the two decoctions are then mixed together and drunk.

Small-pox.—Leaves of batkawet are pounded and soaked in water, and leaves of siseyat are rubbed well in the hands. The two are then mixed together and the patient washed with the solution. He must then go to the Orkoiyo (the paramount chief and principal witch doctor of the Nandi), who alone can complete the cure.

As a preventive charm against small-pox, the leaves of membetiet are pounded and steeped in water and the man washes himself in the solution, afterwards hanging in his hut the bark of membetiet, together with ororiet leaves.

When setting out on a journey, if a Nandi wishes to render himself secure against small-pox he chews the leaves of these two plants, spits them into his hands and rubs them on his head. He then burns some bark of membetiet and rubs the ash into seven small incisions which he has made, one in the centre of his forehead, one on the forehead over each eye, one on the outside of each forearm, and one on each shin.

In some cases these medicines are prepared when there is no immediate need for them and put aside for use when occasion arises. For instance, the above cure for snakebite is usually kept ready, owing to the long time which it takes to prepare. In every case in which a decoction is made, it is set aside to get cold before being drunk by the patient.

The knowledge of these and other specifics is shared by many members of the tribe and is not confined to the orkoi and kipsakein (witch-doctors), though certain medicines and treatments (usually, if not always, of a magical nature) are known only to them; as, for example, in the case of small-pox, the patient must go to the Orkoiyo to be cured.

The use of the above medicines is unaccompanied by magical ceremonies of any kind.

The man on whose information this note is based is named Mabruki Arap Kurur, and is a member of the Kipasiso clan.

Of the native trees and other plants mentioned I have been able as yet to ascertain the European names of only five, viz. :—

Senetwet=*Cassia didimobotrya*.

Lapotuet=*Solanum campylanum*.

Usuet=*Ardisia* sp.

Menjeiyuet=*Indigofera* sp.

Lameiyuet=*Ximenia americana*?

This last is doubtful.

NORMAN P. FENWICK.

Obituary.

Haddon.

Sir Laurence Gomme. *By A. C. Haddon.***54**

George Laurence Gomme was born in Hammersmith in 1853, and was educated mainly at the City of London School, which he left at an early age. After a short period of time in the employment of a railway company, he entered the service of the Fulham District Board of Works, and later that of the Metropolitan Board of Works. When the London County Council was established he joined the Comptroller's Department, then he was made head of the Statistical Department, and in 1900 was appointed Clerk to the Council, which office he held until last March. In 1875 he married Alice Bertha Merck, who also became a distinguished folklorist. They had seven sons, who are still living. He was knighted in 1911. Sir Laurence lived a very strenuous life, and there can be no doubt that the illness which carried him off on February 24th was brought on by overwork.

Such is the bare record of a life devoted to municipal service, the depth and scope of which is known only to those who have an intimate knowledge of the operations of the London County Council. Sir Laurence was not merely a conscientious official, but he was always on the side of progress and broad views of policy, and not a few of the new departures or experiments in municipal affairs were due to his initiative.

Now that Sir Laurence can no longer instruct us along the lines which he has in a peculiar sense made his own, we may enquire what has been his particular contribution to anthropology.

The small but important book, *Ethnology in Folklore*, 1892, may be described as an attempt to introduce more scientific methods into the study of folklore, and thereby cause it to rank with the modern treatment of ethnological data. In it he says, "The most important fact to note in the examination of each fragment of 'folklore' is the point of arrested development. . . . If the incoming civilisations 'flowing over lower levels of culture in any given area have been many, there will be as many stages of arrestment in the folklore of that area' (pp. 11, 12). In following out this argument he points out that two primary lines of arrested development can be traced in British folklore, the one that of a savage non-Aryan culture which was arrested by the culture of Aryan-speaking peoples; the other was the culture of these immigrants, which was arrested by the conflict between Paganism and Christianity (p. 14). The book is mainly an expansion of this argument.

The methodisation of folklore was carried further in the valuable essay "On the Method of Determining the Value of Folklore as Ethnological Data" (*Report of British Association*, 1896, p. 626). Sir Laurence took as his example of method fire-rites and ceremonies in the British Islands. In his "Conclusion," he says, "After the work of classification and comparison is completed for any one custom, there are further conditions before the first results of comparison can be properly and finally accepted. One of these conditions imposes the necessity for proving that the fire customs which have by the application of the comparative method been identified with the fire customs of the early tribal system of Aryan peoples shall, upon examination, be found to be associated with other customs which, upon classification and comparison, can be identified with the Aryan inhabitants of these islands. This work is, of course, a matter of time and further research, and we can only accept the conclusion I have drawn in this report as preliminary to the final results whenever they be obtained" (p. 655). It does not appear that the method of study Sir Laurence suggested, which was further advocated in his *Folklore as an Historical Science* (pp. 165ff.), has been seriously taken up for British folklore, but in principle it is essentially similar to that which has been carried out by Dr. Rivers in his *History of Melanesian Society* (1914), with a

wealth of sociological detail which strongly appealed to Sir Laurence. In the same paper Sir Laurence suggested the employment of a diagram, which he termed "the ethnological test-figure," but this suggestion appears to have been dropped.

In *Folklore as an Historical Science* (1908) it is shown how pure history is intimately related to folklore at many stages, but this relationship has been ignored by both historian and folklorist (p. xii). "Without analysis we cannot properly arrive at a classification; without classification we cannot work out the association of survivals. . . . Custom, rite, and belief treated in this fashion become veritable monuments of history—a history too ancient to have been recorded in script, too much an essential part of the folk-life to have been lost to tradition" (pp. 169, 170). "Not only is it necessary to ascertain the proper position of each item of folklore in the culture area in which it is found, but it is also necessary to ascertain its scientific relationship to other items found in the same area; and I have protested against the too easy attempt to proceed upon the comparative method. Before we can compare we must be certain that we are comparing like quantities" (p. xiii). Two examples are given to "serve as a warning against the too general acceptance of the custom and belief of savage and barbaric races as identical with the custom and belief of early or primitive man. Such identification is in the main correct. . . . Comparative folklore, then, to be of value, must be based upon scientific principles" (pp. 176, 177). "A custom or belief exists as a living force before it sinks back into the position of a survival. It is the lingering effect of this living force which helps to preserve it for so many ages, and in the midst of such adverse circumstances, as a survival among other customs and beliefs existing under a different living force. It is not possible, therefore, to ascertain the origin of custom or belief in survival except as a fragment of the social institution to which it originally belonged" (pp. 304, 305). "In India primitive economics and religion go hand in hand as part of the village life of the people; in England primitive economics and *survivals* of old religions, which we call folklore, go hand in hand as part of the village life of the people. And it is not in the province of students to separate one from the other when they are considering the question of origin" (p. 360).

Sir Laurence's love of London and his keen historical sense led him to study the history of London and its institutions, which his ethnological bias enabled him to deal with along original lines. Apart from the more technical aspects of municipal affairs, he published two memorable books which supplement each other—*The Governance of London: Studies on the place occupied by London in English Institutions* (1907), and *London* (1914).

The main points made in these books are (in the author's own words) that the Romans administered Britain when it was inhabited by Celtic Britons who were in the tribal stage of political evolution; the Romans themselves were in an advanced stage of imperial politics; while the English who conquered the Celtic tribesmen and the Roman cities were in the same tribal stage of political life as their Celtic opponents. These are the essential factors in the early history of London, and their influence upon each other have to be traced. London was originally a stronghold of the Celts where a cult was practised of the Celtic deities Lud and Belinus, and the anomalous treatment of London by the Romans is explained by the predominance of this Celtic element. Londinium was no doubt in the position of a municipium, and not a colonia like Lincoln, York, or Gloucester. It was thus a city of the Empire, and not merely a city of Roman Britain; it was built on a Roman road which connected it with Rome as the centre of the Empire. All that Londinium contains by way of contribution to the full history of London comes from Roman law and the Roman constitution. When Roman London was freed from the sovereignty

of Rome, this Celtic influence asserted its dominating force and helped to make post-Roman London a primary institution of the country. Roman London, thus influenced, in its turn dominated the inner working of mediæval London, and in its essence dominates modern London. London constitutionally never appears in Anglo-Saxon history at all; it appears as a fortified bulwark against the invaders of the country, but it asserts rights against Anglo-Saxon laws and owns no formal allegiance to an external sovereign power, and no Anglo-Saxon king granted it a constitution. The Danes were kept out of London until London accepted them as overlords. The Normans were kept out of London until they entered by agreement. In Norman and later times London as a chartered city has once more an external sovereign to whom it owes its constitution, but at the same time there was a fierce conflict with the monarchs who granted it charters; Norman London must have received from Anglo-Saxon London strange and strong rights of independence which Anglo-Saxon London could only have built up out of its Roman predecessor. Sir Laurence develops this thesis in a masterly manner, showing great insight in his interpretation of documents, and topographical and other data.

There are many other aspects of past and present social life in which Sir Laurence took a keen interest and to which he contributed illuminating ideas, but enough has been quoted to indicate the general trend of his thought, which was backed up by a wide range of learning. It is obvious that had he been able to enjoy the leisure that he had so well earned we might have expected yet greater contributions to historical folklore.

Sir Laurence was a member of several learned societies, in most of which he had held office. At the time of his death he was president-elect of the Anthropological Section of the British Association. He was as ready to impart information as to receive it; he was catholic in his sympathy, and always welcomed the results of investigations in departments of anthropology other than those which he more particularly studied. It is a terrible blow for his friends to feel that no longer can they have converse or correspondence with so cheery and suggestive a comrade.

ALFRED C. HADDON.

Egypt.

Giuffrida-Ruggeri.

A Few Notes on the Neolithic Egyptians and the Ethiopians.

By V. Giuffrida-Ruggeri, University of Naples.

55

Were the neolithic Egyptians identical with their successors? Professor Naville says they were: "La tribu qui, en possession du cuivre, s'est établie dans la vallée du Nil, au dessous de la première cataracte, et qui mêlée aux indigènes néolithiques, a produit la civilisation des Pharaons était africaine et j'ajoute chamitique, car les recherches attentives du Dr. Elliot Smith ne lui ont révélé aucune différence entre les crânes des primitifs et ceux des dynasties thinites."* This tribe, which manufactured and used copper tools, was still predynastic, and if it really followed the jackal "Apuatu" in its descent down the Nile,† it was another wave of Ethiopians comparable to the preceding neolithic wave. But they may have been the same neolithic people of Upper Egypt who had found a means of obtaining copper from the neighbouring mines of Sinai, which would explain the absence of great anthropological differences between the more ancient predynastic skulls and those more recent, including those of the first dynasties.

But things change when we get to the end of the 3rd dynasty, when mummy-

* Naville, E., "L'origine africaine de la civilisation Egyptienne." *Revue archéologique*, 1913, II, p. 56.

† Naville believes they came with copper from the regions south of Abyssinia, which I cannot think probable. Naville, E., "Le passage de la pierre au métal en Egypte." *Archives suisses d'Anthropologie générale*. T. I (1914), n. 1-2, p. 58.

fication and a whole new era begins, that of the Pyramid builders. The passage which seems so brusque in Upper Egypt, can only be explained, according to Naville, by admitting that a slow change has taken place in Lower Egypt. The anthropological exponent of this change is found in the series of Giza (4th, 5th, and 6th dynasties) of Lower Egypt and in other and later series in Upper Egypt.

Comparing these series with Predynastic Egyptians we find the latter *more dolichocephalic, more prognathous, and more platyrrhinian*,* thus justifying the opinion that the prehistoric series were, at least to a large extent, made up of Ethiopians, and that afterwards a great infiltration in the opposite direction took place; this infiltration must have been fed from the near east, that is from Syria, the peninsula of Sinai, and the North Arabian coast, territories already occupied by the Mediterranean race, *i.e.*, by Leucoderms. Nevertheless, because the Leucoderms crossed with the Ethiopians, there still remained some characteristics of Ethiopian affinities in the Egyptian people; especially visible to themselves was the colour of their skin, so that they noticed the difference between themselves and the Libyans, and called these latter *Tehenu*, which means "pale yellow."†

Naville tells us that on a monument attributed to the 1st dynasty is to be found a representation of the triumph over the Anu which became a traditional fête, the Anu being represented by a kneeling African prisoner.‡ Now the Egyptians of the historic epoch called their predecessors, the primitives, by the name of Anu, of which the *Anu Seti* were the inhabitants of Nubia who lived on the banks of the Nile. Tradition tells us that Horus represents Lower Egypt and Set Upper Egypt,§ and as Lower Egypt is said to have been victorious, what Naville says to the contrary|| can only refer to the anterior descent of the Ethiopians.

The populations comprised under the generic name of Anu which Naville considers as the Hamites who occupied North and East Africa were possibly Ethiopians, first descending victoriously from the South, then defeated by Horus; therefore it is evident that the defeat of this people, correctly represented as African, may indicate the moment at which took place the brusque change in Upper Egypt spoken of by Naville.

Another point to modify is this: "Les recherches du Dr. Elliot Smith ont établie définitivement ce qu'avant lui le Dr. Fouquet, le Dr. Lortet et d'autres avaient affirmé; c'est que l'Egyptien de la période néolithique n'est point un nègre, il appartient au type caucasique"; this is too hurried a conclusion, his not being a Negro does not necessarily mean he is a Caucasian; neither can Elliot Smith affirm that there is not a difference between the neolithic Egyptian and the white man, as he agrees with me in placing the Predynastics with the Ethiopians,¶ and the Ethiopians are certainly not Negroes, but neither are they a Mediterranean people.

* It is for this reason that MacIver, D. R., and Wilkin, A., in *Libyan Notes*, London, 1901, p. 107, wrote: "In face of these results it is impossible any longer to maintain the view that the Prehistoric Egyptians were Libyans", a conclusion I have lately confirmed: Giuffrida-Ruggeri, V., "Were the Predynastic Egyptians Libyans or Ethiopians?" *MAN*, 1915, 32, p. 56. In the printing of this note some errors occurred, *e.g.*, p. 52, l. 22, for "fading away" read "further away"; p. 56, l. 9, for "white stained" read "white skinned."

† Naville, E., "L'origine africaine," &c., *loc. cit.*, p. 50, "Tehennou veut dire les jaunes claires, ce que nous appellerions les blancs."

‡ *Idem*, p. 53.

§ Eрман, A., *La religion Egyptienne*, trad. franç., Paris, 1907, p. 31, "sous cette appellation *Horus et Set*, on perçoit comme un écho des anciens souvenirs laissés par ce temps préhistorique dans lequel l'Egypte était partagée en deux royaumes hostiles l'un à l'autre." Here also it is stated that Set was the divinity of Upper Egypt.

¶ Naville, E., "L'origine africaine," &c., *loc. cit.*, p. 55.

¶ Elliot Smith, G., "Professor Giuffrida-Ruggeri's Views on the Affinities of the Egyptians." *MAN*, 1915, 41, p. 71. Elliot Smith never made use of the term "Caucasian."

It is in the degree of difference between the Ethiopians and the Mediterranean peoples that we are not in accord, as Elliot Smith finds a closer affinity between the Mediterranean people and the Ethiopians* than between the Mediterranean people and the Blond Nordic, while I think the contrary. Such appreciations are always debatable, being dependent on personal judgments, and in all cases ought to be examined in the light of the entire taxinomic classification.

Our taxinomic classification is made up of a certain number of elementary species, which are divided into varieties and sub-varieties, that is to say, they are elementary species inasmuch as they all together form a "collective" species, but each is susceptible of subdivision, as De Vries also admits. There is, therefore, no "heterogeneous series of disparate elements" in *Homo sapiens indo-europaeus*, but a wealth of subdivisions, while on the other hand *Homo sapiens indo-africanus* is a parallel species, but poor in subdivisions, probably because those living between Hindustan and Somaliland have disappeared. However, this ought not to surprise as it happens in many other animal species, especially as one has a Northern habitat and the other an Equatorial habitat.

According to the habitat we distinguish between Equatorial and Boreal species; the former are :—

<i>H. s. australis</i> ,	spec. elem.
" "	australianus, var.
" "	veddaicus, var.
" "	tasmanianus(?), var.
" "	melanesiensis, var.
<i>H. s. pygmaeus</i> ,	spec. elem.
" "	melanesiacus, var.
" "	asiaticus, var.
" "	africanus, var.
" "	steatopygus, var.
<i>H. s. niger</i> ,	spec. elem.
" "	protomorphus, var.
" "	occidentalis, var.
" "	meridionalis, var.
<i>H. s. indo-africanus</i> ,	spec. elem.
" "	dravidicus, var.
" "	aethiopicus, var.

The latter (Boreal) are :—*H. s. indo-europaeus* and *H. s. asiaticus*, with their kindred species *H. s. americanus* and *H. s. oceanicus*; these last are considered as Northern from their origin, though they are geographically not so. Each of these species is subdivided, as are the precedent, into varieties and sub-varieties, which for *H. s. indo-europaeus* are the following :—

<i>H. s. indo-europaeus</i> ,	spec. elem.
" "	brachimorphus, var.
" "	alpinus, sub-v.
" "	armenicus, sub-v.
" "	pamiriensis, sub-v.
" "	dolichomorphus, var.
" "	nordicus, sub-v.
" "	mediterraneus, sub-v.
" "	indo-afghanus, sub-v.

* Elliot Smith, G. ("The Influence of Racial Admixture in Egypt." *The Eugenics Review*, October 1915, pp. 9-10), unites both in one "Brown Race," which is contrary to any analysis of the facts.

Perhaps Professor Elliot Smith is scandalised at seeing brachycephals and dolichocephals united in one species, but this also happens in other species. Everybody knows that in Japan are found brachycephals and dolichocephals, as in other parts of the habitat of *H. s. asiaticus*, so also the habitat of *H. s. americanus* includes brachycephalic varieties and dolichocephalic varieties, and also the habitat of *H. s. oceanicus* includes the dolichocephalic Maori (*H. s. oceanicus pseudo-mediterraneus*), who resembles the Mediterranean people. But there are other characteristics which unite the Maoris to the other Polynesian people, even to the brachycephalic Polynesians, just as there are other characteristics which unite the Mediterranean peoples to the northern peoples, and, *more remotely*, to the brachycephalic Eurasians. If, on the other hand, one unites the brachycephalic people of Alpine countries, of the Balkans, of Armenia, and other parts of Asia, to the Polynesians and the brachycephalic Americans, one totally disregards any geographical consideration in homage to a form of the skull which does not imply any correlation to other physical characters. This skeletal character owes its exaggerated importance to the fact that it is very visible in the living man and in the series of skulls collected in museums, but in my opinion it is only valuable in determining varieties; therefore it has no value in joining together across the terrestrial space all those who are alike in that character.

Similarly I think that in linking together the Ethiopians and the Dravidians in one human species, *H. s. indo-africanus*, which has an equatorial habitat and a peculiar group of characters (especially primitive), I ought not to take into account the resemblance that they may have to other varieties or sub-varieties belonging to a different elementary species, for instance, to the Mediterranean sub-variety of *H. s. indo-europaeus*. One cannot take into account such a resemblance, because the Mediterranean sub-variety has a mass of other characters (proportions of the body, orthognathism, leptorrhiny, depigmentation of the skin) which are common to other sub-varieties belonging to the northern habitat in which *H. s. indo-europaeus* lives. The resemblances between varieties or sub-varieties belonging to different elementary species only show that these belong to one collective species: *i.e.*, *Homo sapiens*, which in its various branches may have originated parallel forms,* that in one or even more features may be identical.

V. GIUFFRIDA-RUGGERI.

REVIEWS.

Ethnology.

Thalbitzer.

The Ammassalik Eskimo.—Meddelelser om Grönland. Vol. XXXIX. Contributions to the Ethnology of the East Greenland Natives. Part I. Edited by William Thalbitzer.

56

This volume of *Meddelelser om Grönland*, which is written in English, forms a comprehensive anthropological study of the Eskimo inhabiting the Ammassalik (Angmagsalik) district on the east coast of Greenland at 65 deg. 39 min. N. lat. It consists of seven parts, which fall into two main divisions.

1. Parts I-VI (pages 1-317) are a collection of papers by G. Holm, H. Rink, and others, published originally in Danish in *Meddelelser om Grönland*, Vol. X (1886, 1888), and here translated into English, and to some extent revised and enlarged, the most important addition being Holm's account of his voyage and discovery of Ammassalik. They constitute the anthropological results of Holm's expedition in 1883-85, in which, by discovering Ammassalik, he "brought an entirely new people within the pale of Anthropology."

The Ammassalik Eskimo had previously had no direct contact with Europeans. The drift ice which flows down from the north along this coast almost throughout the

* This has been widely demonstrated in my book, "L'uomo attuale, una specie collettiva." Roma, Albrighi-Segati, 1913.

year had proved an obstacle to earlier navigators, none of whom appears to have penetrated far north, with the exception of Graah, who, in 1829, reached 65 deg. N. lat., and was there falsely told that that was the limit of human habitation. Thus, when Holm and his staff of anthropologists arrived on the scene to spend the winter, they found a people who were quite unspoiled by contact with explorers, traders, or missionaries, and whose isolated position had enabled them to preserve and develop their peculiar culture in an exceptionally high degree of purity. This fact alone gives a particular interest and value to the work of Holm's expedition for all students of primitive life. As to the scientific fruits of the expedition, Thalbitzer agrees with the dictum of Schultz-Lorenzen that, "in the ethnographic field at any rate this one winter with its detailed investigation has yielded more information than the more than 150 years of colonisation and scientific investigation of the west coast."

These six parts comprise a general sketch of the Ammassalik Eskimo, a paper on their physical anthropology, a complete census of the population of the east coast of Greenland, notes on their dialect with a vocabulary, and, finally, a collection of legends and tales with comparative notes.

2. Part VII (pages 321-755). This part, the work of Thalbitzer himself, has not been published previously, and forms a most important contribution to our knowledge of this interesting people. It forms a continuation to his "Description of the Amdrup collection from regions north of Ammassalik" (*Meddelelser om Grönland*, 1909). It consists in the main of a thorough and detailed description of the material culture of the Ammassalikers, together with comparative notes on points of agreement with other Eskimo regions.

It is based chiefly upon three large ethnographical collections, now in the National Museum of Copenhagen, viz.:—(1) That of G. Holm, made in 1884-85; (2) that of Amdrup in 1898-1900 (described by Amdrup in M.o.G. XXVIII); and (3) the collection accumulated by Petersen during his stay in Ammassalik since 1894, together with Thalbitzer's own small collection. The descriptions are liberally illustrated with more than 300 excellent photographs.

There is an interesting digression on page 486 on the use of iron in former times. Neither meteoric nor tellurian iron have hitherto been found on the east coast, though both are known in N.W. Greenland. Iron has, however, been used by the Ammassalik since the early eighteenth century, being obtained by barter from the west coast. In another digression (page 542) Thalbitzer suggests a new explanation of the origin of the word *Eskimo*, which he thinks may have been an Algonkin corruption of *Excomminguois* or *Escoumins*, meaning "excommunicated" or "heathen," terms used by the Jesuit missionaries in 1612 in alluding to the Eskimo. This suggestion, though ingenious, seems more than doubtful, and the author modifies it in his Addenda in the light of information contained in Petitot.

Following the descriptive portion are some important Addenda, e.g., on the mediæval Norse colonies in South Greenland; and, finally, the author sums up his conclusions, and discusses at length the origin of the Ammassalik people, and the routes of migration of the Greenland Eskimo in general, as indicated by cultural evidence. A bibliography, a full list of objects in the Amdrup and Thalbitzer collections, and a map complete this section of the volume. It is a notable piece of work, and such criticisms as we have to offer concern only minor points of detail.

An index would have added greatly to the usefulness of the work, and its omission is regrettable; but perhaps it will be supplied in Part II. The English is not always perfect, or free from the awkwardness to which translations are liable, and there are a disagreeable number of misprints. The metathesis "gods" for "dogs" (?) (page 731) is unfortunate. But these are minor flaws. The list of

objects peculiar to the Ammassalik district, given on page 728, should be treated with caution; it includes, we understand, many items which are found on the west coast also. Such are Nos. 2, 3, 4, 6, 13, 14, 15, 16, 20, 25, 27, 28, 29, 31, 33, 37, 39, mentioned in a recently published paper by M. Porsild on "The Material Culture of West Greenland." A certain amount of overlapping in Parts I and VII is inevitable, and we can only be grateful that Holm's paper has been given to us here complete.

As to the general excellence and thoroughness of the work there can be no two opinions. It gives us an unusually full and detailed picture of a people, who alike for their remarkable adaptation to an inhospitable environment, and for their ingenuity and artistic skill, are deserving of careful study. It is evident that no pains have been spared to render the work as complete as possible from every point of view, and it will undoubtedly remain the standard authority for this particular field of ethnography.

The titles of the seven parts are as follows:—

- (i) *Ethnological Sketch of the Angmagsalik Eskimo*, by G. Holm, 1911 (substantially a translation of the Danish in M.o.G., X, 1888, but enlarged and revised by the author).

Contains an account of the voyage and first meeting with the natives; a description of the country, its fauna and flora; the people, their material culture, social and spiritual life; and general *résumé* of their character and attitude towards the expedition. pp. 1–147. 63 illus.

- (ii) *Contributions to the Anthropology of the East Greenlanders*, by Sören Hansen (translated from Danish, published M.o.G., X, i, 1886, and revised by the author in 1911).

Contains an account of their physical anthropology, and measurements taken in 1884 and 1898. pp. 149–179.

- (iii) *List of the Inhabitants of the East Coast of Greenland, made in Autumn, 1884*, by Johannes Hansen, Catechist. *Notes on the List* by G. Holm [1887], 1911. pp. 181–202.

- (iv) *The East Greenland Dialect*, by H. Rink, 1887 (revised by Thalbitzer, 1911).

General peculiarities, changed vowels, softened consonants, periphrases. Vocabulary, arranged by classes of objects. pp. 203–223.

- (v) *Legends and Tales from Angmagsalik*, collected by G. Holm, and translated by Johan Petersen [1887], 1912.

Introductory notes, 47 tales, 5 drumsongs, 3 magic charms. pp. 225–305.

- (vi) *Notes to G. Holm's collection of Legends and Tales from Angmagsalik*, by H. Rink [1887], 1912.

Twelve or fourteen are identical with, and another twelve or fourteen have elements in common with West Greenland tales. Sixteen are more or less peculiar to Ammassalik. There are a few elements of Labrador and Baffin Land tales. pp. 309–317.

- (vii) *Ethnographical Collections from East Greenland (Angmagsalik and Nualik)* made by G. Holm, G. Amdrup, and J. Petersen, and described by W. Thalbitzer, 1912.

Introduction. History and ancestors. Population and settlements. Material culture. Addenda. Conclusions and discussion of routes of immigration. Bibliography. List of objects in Amdrup and Thalbitzer collections. Map. pp. 321–755. 335 illus.

THE AMMASSALIK ESKIMO.

The inhabitants of Ammassalik call themselves *Eewin* (W.Gr. *inuit* = "natives") or *Taawin* (shades); *Ammassalik* means "where caplins are caught," and the place

is so called owing to the abundance of this fish, which occurs nowhere else on the east coast. Physically the Ammassalik are to be regarded as pure Eskimo, without any trace of Norse admixture; the two sets of measurements taken at an interval of fifteen years reveal great average stability of the type, in spite of individual variations. They are mesaticephalic, with a tendency to dolicocephaly (av. ceph. ind., 76.4). Their stature is medium to low (1,650 mm.). Their physical development is superior to that of other Greenlanders. The frequent absence of one or more of the last molars or "wisdom" teeth is remarkable in a people whose masticatory system is otherwise powerfully developed. The appearance of a blueish-black spot in the sacro-lumbar region during the first year of life is a peculiarity noted in many Asiatic peoples, though very rare in Europe, and affords another mark of their Mongolian affinities. The men's hair is black or dark brown; the lighter shade of the women's hair is attributable to their practice of washing it in the urine-tubs. The percentage of women to men is 123.7. Early marriages are common, and give rise to frequent divorce, which is not attended by any ceremony or disgrace, a man sometimes changing wives five or six times. Polygamy is common, though no instance is on record of a man having had more than two wives simultaneously. First cousins do not marry. The men spend most of their time in hunting, skill in which is a *sine quâ non* of existence. Women are in a very subordinate condition, and spend most of their life sitting on the domestic platform cooking, sewing, and minding the children. Children are generally suckled till the age of two; they are treated with the greatest affection by their parents. It is interesting to note that colds and chest diseases are their commonest ailments, against which an arctic climate would not appear to afford any immunity. They have no real remedies for internal disease. Old or sick people often commit suicide by throwing themselves into the sea, when they are no longer able to support themselves.

They believe their existence to be threefold, consisting of body, soul, and name; the latter is easily offended, in which case it deserts the owner, and the body falls ill. Hence a natural reluctance to pronounce their own names. The name of a recently deceased person may not be mentioned; thus, if he was called after a common object, that object has to be renamed or a periphrasis adopted. This accounts for certain dialectic peculiarities which cannot be explained on philological grounds.

They are a quick witted and hospitable people, with considerable artistic talent, which is shown mainly in embroideries on clothes, and ivory reliefs on wooden utensils. In times of extreme dearth they have been known to eat the corpses of their dead; European whalers of the eighteenth century, by causing the disappearance of the whale on this coast, are partly responsible for these occurrences, which have given rise to a persistent though unfounded belief among West Greenlanders, that the Ammassalik are cannibals.

There is no lack of driftwood at Ammassalik; for besides wrecks, whole firs from Siberia are frequently brought thither by the Polar current; they obtain stones too in the same way, and were actually found in possession of a bamboo and a cocoanut by Holm's expedition.

Their material culture is on the whole typically Eskimo; a list of its provincialisms, mentioned already, is given on p. 728. These include hinged toggle heads on ice-sealing harpoons and salmon spears, triangular needle skins, wooden sucking tubes, bags of dried caplin heads sewn together, and spindle buzzes. Their wooden maps, carved to represent the coastline, are ingenious and remarkably accurate. The hinged toggles are known nowhere else except on the north-west coast of America, and spindle buzzes only at Behring Straits and among the Chuckchee.

The latter may be a degraded relic of the true spindle, which would lose its function in an arctic climate, owing to the lack of material suitable for spinning.

At the time of Holm's arrival they were unacquainted with fishing by means of nets or hooks; the latter were introduced by Holm, but did not find much favour. Another notable omission is the ivory needle-case, so common to most Eskimo regions; tobacco was only known to them in the form of snuff, and but rarely in that form. There are a few intrusive elements which must be ascribed to indirect European influence; such are peaked caps, iron compound saws, mortised work in kaiaks and tubs, and red and white glass beads. The use of the cross-bow as a toy and for shooting small birds must be a survival from the mediæval Norse colonists in the south of Greenland, and the rectangular form of house was perhaps derived from the same source. The Ammassalik do not appear ever to have come into direct contact with the mediæval colonists; their only tales concerning former conflicts with Europeans seem to be localised versions of West Greenland legends. In spite of careful investigation, Holm found no trace of Norse settlements on the east coast.

As to the route of immigration by which the Ammassalik arrived at their present habitat nothing can be stated with certainty. Until further archæological investigations have been made, it will be impossible to define the exact relation in which they stand to the people who formerly inhabited the more northerly parts of the east coast of Greenland, and whose relics are found at intervals all the way up the coast to the 80th parallel. The continuity in material culture between these people and the present Ammassalik is only partial, many objects represented in the one being absent from the other; but allowance must be made for several centuries' further development of the Ammassalik, as well as for the change from an arctic to a sub-arctic climate. Rink and Holm both held that the Ammassalik were descendants of these north-east Greenlanders, and that they had come round the extreme north of Greenland from Grinnell Land. Thalbitzer, on the other hand, while withholding final judgment, prefers to think that they are a blend of two streams of migration from the north and from the south. The main problem for solution is whether the northern and southern migrations ever really fused, and if so at what point? Is Ammassalik that point? The question is complicated by recent migrations of the Ammassalik northwards, where they have perished and left their relics to bewilder archæologists. Moreover, of recent years, Western influences coming up from the south have been paramount among the Ammassalik, and have tended to obscure some of their older cultural features. But in any case we fear that racial origins can never be settled by an appeal to elements of material culture alone, since migrations of implements take place independently of peoples.

Ammassalik is now the only inhabited place on the east coast of Greenland, the inhabitants having concentrated round the Danish missionary station established there by Amdrup in 1894. It is pleasing to note that they show no signs as yet of succumbing to the attacks of "civilisation," and their numbers have of late years been continuously on the increase, rising from 247 in 1895 to 554 in 1909.

H. J. BRAUNHOLTZ.

Siberia.

Czaplička.

Aboriginal Siberia: a Study in Social Anthropology. By M. A. Czaplicka, with a preface by R. R. Marett. Oxford, Clarendon Press, 1914. Pp. xvi+374, with Plates and Map. Price 14s. net.

In this volume Miss Czaplička has summarised the available information relating to the sociology and religion of the aboriginal tribes of Siberia—a piece of work for which she indeed deserves well of anthropologists. Not only is it a convenience

to have these facts collected from many scattered sources. It is a greater service to have made available valuable information which in its original Russian was to many of us a sealed book.

It would be unjust to Miss Czaplíčka if it were made to appear that she has done nothing more than compile and translate. She has dealt critically with her material, has classified and systematised it, thus affording a sure guide for the lines of future research.

Miss Czaplíčka divides the tribes into two groups, for which she suggests the titles "Paleo-Siberians" and "Neo-Siberians." In the former group she places the tribes of the lowland zone of the north and north-east, such as Yukaghir, Chukchee, Koryak, Giliak, &c., and in the latter the Finnic, Turkic, and Mongol tribes of the higher lands, more recent migrants into Siberia from Central Asia. This classification is not, perhaps, above criticism on ethnological grounds, but as a working basis in dealing with Siberia as a unit it is convenient, and represents certain broad distinctions.

The author has naturally devoted considerable attention to that important person, the shaman, and it is interesting to note that the difference in social organisation and in religious ideas which are found in the different racial and geographical environments of the two groups are also apparent in the character of the shaman, who, in the Neo-Siberian group is more pronouncedly a professional. In the northern group what Miss Czaplíčka has called "family shamanism" prevails, and the faculty tends to be hereditary. The author has also devoted attention to the relation of shamanism and sex, and propounds a theory of the shaman's virtual relegation to a third or neutral sex.

One very interesting chapter deals with "arctic hysteria," an affection which leads the subject to imitate any action performed before him or her. Miss Czaplíčka compares it to *latah*, which occurs in the Malay Peninsula, and after a consideration of the possible influence of environment, suggests that it may be an affection of the Mongol race.

Those who have read this book will have little doubt as to Miss Czaplíčka's qualifications for her subsequent journey to Siberia, and will await the publication of her results with eager anticipation.

E. N. F.

Literature.

King.

A History of Babylonia and Assyria. Vol. II: A History of Babylon from the Foundation of the Monarchy to the Persian Conquest. By Leonard W. King, Litt.D., F.S.A. Chatto & Windus. 1915.

58

It is five years since the appearance of the first volume of Professor King's *History*, that dealing with the history of Sumer and Akkad. The subject of the present volume will be more familiar to the general reader since it covers a period with which Greek, Hebrew, and Egyptian records have put all who are interested in ancient history in touch. Nevertheless, this new volume fills a yawning chasm in our literature on the ancient East. Since 1886, when Tiele published his *Babylonisch-assyrische Geschichte*, no book has entirely taken its place, though the subject has been dealt with, *inter alia*, by Eduard Meyer in his *Geschichte des Altertums*, by Mr. Hall in his recent *Ancient History of the Near East*, and in many excellent short accounts and monographs on special subjects by English, American, and European scholars. In spite of all this it was necessary till now to turn to Tiele for the best detailed account of Babylonian history, although his book was written before the discoveries at Tel el Amarna and Boghaz Köi, Carehemish, and Knossos had revolutionised previous conceptions of the history of the Near East in the second millennium, B.C. The first detailed history of Babylonia to supplant Tiele's is Professor King's.

Most historians have treated Assyria and Babylonia together in their books. Dr. King has preferred to follow their fortunes separately. Though his method involves dangers of repetition it is probably the best possible. At least, in the case of Babylonia it avoids the tendency to devote too much space to the unending succession of campaigns of Assyrian kings, on whose triumphant exhibitions of frightfulness modern historians are inclined to fix their attention, to the detriment of the study of the Babylonian people. Dr. King's history should tend to correct this tendency and to strengthen our sense of the continuity of Babylonian history, which suffered no real interruption from Amorite or Kassite or Assyrian conquests.

In a book like this, which will be, perhaps may be called already, a standard work, it is difficult to single out special parts for comment. In his opening chapters Dr. King shows himself abundantly qualified for the task he has set himself, of historian on the grand scale. Alike in his account of the results of Koldewey's excavations at Babylon, in his statement and handling of the chronological problem, and in his treatment of the ethnological questions that arise in connection with the 1st Babylonian Dynasty, Dr. King shows himself a historian of the front rank. Chapter III may be cordially recommended to such readers as have generally been bored by discussions of chronological questions. His account of the Age of Hammurabi is excellent, and such as was to be expected from one who has already produced important work on the subject.

We have no cause of quarrel with Professor King but this—that he could not have given us even more. Many readers of Chapters V and X may perhaps wish that Dr. King had written a still further chapter on the Age of Nebuchadnezzar, or those still but little described centuries that witnessed the decline and fall of Babylonian civilisation. It is with the cordial wish that Professor King may yet add an account of the *Götterdämmerung* in Babylonia that we close this brief review. LEEPER.

France : Archæology.

Baudouin.

L'orientation des Mégalithes funéraires et le culte solaire à l'époque néolithique. Les Rochers à Sabots d'Equidés et la théorie de leurs légendes. 59 (Sculptures vraies et Dépressions naturelles). Congrès International d'Anthropologie et d'Archéologie préhistoriques. By Dr. Marcel Baudouin.

Dr. Marcel Baudouin, Secretary of the Société Préhistorique Française, is one of the foremost authorities on the megalithic monuments of his country, and his conclusions respecting them deserve the most attentive consideration. With regard to the French dolmens he holds that there are none opening to the north, and that most of them have their entrances open to the sun at mid-day, or to the sun rising or setting, western entrances being specially exceptional, and that this was intentional, not accidental. The fact that some openings do not face the sun at any time, which Sir Norman Lockyer would explain by an intention to refer to a certain star at some period, Dr. Baudouin attributes to the precession of the equinoxes having altered the position of the astronomical north, and he infers from this that some of the monuments must be 10,000 years old.

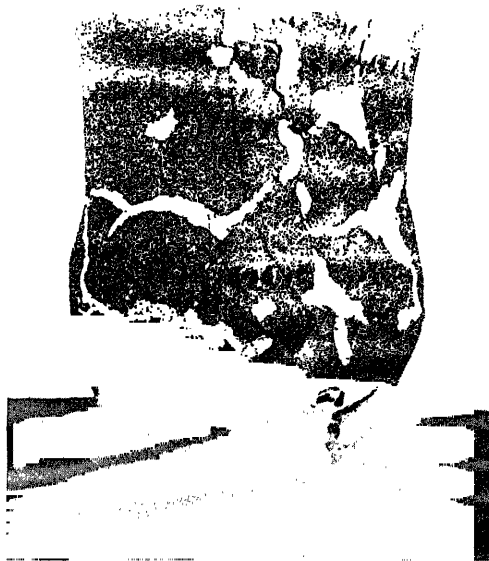
Cavities on rocks assumed to be footprints of horses, mules, or asses, belonging to saints or other distinguished personages, and other cup-markings, appear to be much more frequent in France than in our islands, and Dr. Baudouin, while distinguishing between those which are artificial wholly or in part and those which are natural, traces them all back to Pegasus, the flying horse of the sun, and finds a system of orientation connected with them as well as with the dolmens. He goes into a great quantity of details in a very thorough manner, in which the space available in MAN does not enable us to follow him as we could wish.

A. L. LEWIS.



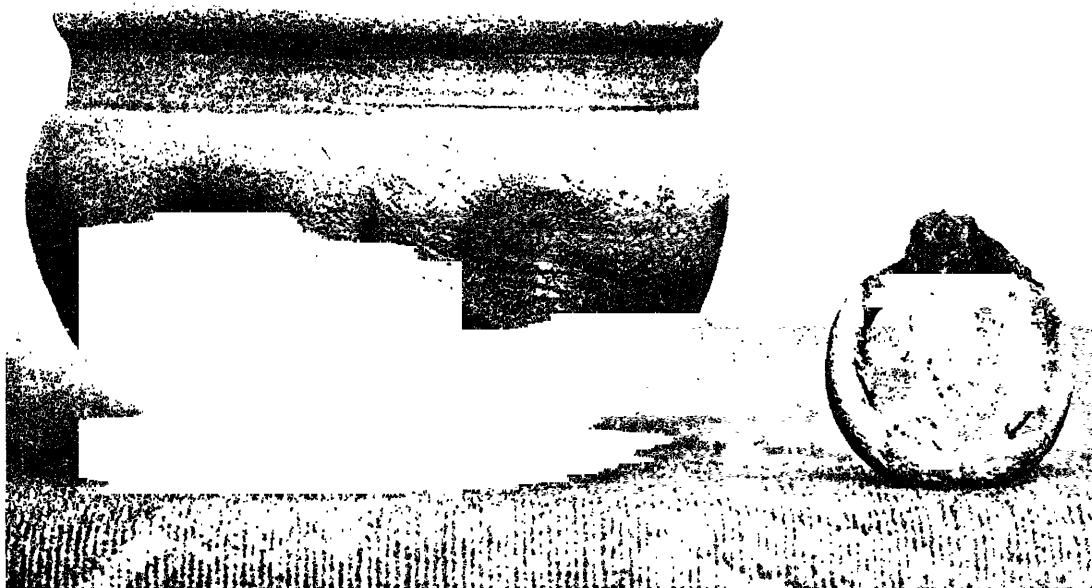
[Photo, F. Woolnough, The Museum, Ipswich.

FIG. 1.—SKULL OF NEOLITHIC YOUTH.



[Photo, F. Woolnough, The Museum, Ipswich.

FIG. 2.—RESTORATION OF URN FOUND WITH NEOLITHIC YOUTH.



[Photo, Aldophus Tear, Ipswich.

FIG. 3 (a).—ROMAN POT.

FIG. 3 (b).—BRONZE BROOCH.

ORIGINAL ARTICLES.

Archæology.

With Plate G.

Moir.

On the Discovery of some Human Bones, &c., of Neolithic and later Date, in the Ipswich District. *By J. Reid Moir.*

60

During excavations conducted to reach the base of the Red Crag of Suffolk, some discoveries have been made of human bones, &c., buried in the superficial deposits forming the present land surface, and though these discoveries are not, perhaps, of any great scientific interest, it seems desirable to place the details and circumstances on record.

THORINGTON HALL, WHERSTEAD.

During 1913 extensive diggings were conducted in the Shelly Red Crag at Thorington Hall, Wherstead, near Ipswich. The crag at this spot is in places capped by a very hard loam (probably decalcified boulder clay), and on August 28th of the year mentioned a human skeleton in the contracted position, together with the remains of an urn, were found lying in a slight hollow excavated in the crag and under 6 feet of the loam (Plate G, Figs. 1 and 2). The author was present when the skeleton was found, and superintended every stage of its removal.

An examination of the section above the remains showed clearly that a grave had been dug down from the present surface to the underlying crag, the sides of grave being quite visible, the infilling being composed of a mixture of loam and shelly crag. The body had evidently been placed in the grave upon the back, the face being turned towards the left shoulder and looking due west. The remains of the urn were found at the right side of the body. This urn Mr. Reginald Smith regards as of late Neolithic or early Bronze Age date.

No implements or ornaments of any sort were found in the grave, nor, so far as is known, have any Neolithic implements been found in the immediate district.

This discovery demonstrates very clearly that the signs of digging of a grave of the Neolithic period remain visible in clayey soil, such as occurs above the crag at Thorington Hall, and there can be little doubt that if a grave had been dug down through the compact loam covering the human bones found in the sand pit of Messrs. Bolton & Co., Ltd., Henley Road, Ipswich,* signs of such digging would have been easily observable; but, as was recorded at the time, no such evidence of disturbance was present in the section. The skeleton found at Thorington Hall was sent to Professor Arthur Keith, F.R.S., of the Royal College of Surgeons, London, who has furnished the author with the following report:—

Anatomical Description of the Skeleton.

"The depth and nature of the grave, the posture of the various parts of the skeleton, having been already described by Mr. Reid Moir, there remains for me to give merely a brief account of the kind of individual represented by the bones. The condition of growth of the various parts of the skull and skeleton, the stage of tooth-eruption leads me to infer that a lad aged between 12 and 14 years was buried in the grave. The second of the permanent molar teeth is coming into use; so are the canine teeth. The pre-molar teeth have just come into use but are as yet unworn. The crowns of the wisdom teeth (third molars) are forming and are still buried in the jaw. The growth or epiphyseal lines of the long bones are still open. The cause of death cannot be ascertained, there is no mark of disease to be seen on the bones. As regards stature and stage of development, the Wherstead lad is directly com-

* J. Reid Moir and Arthur Keith. "An account of the discovery and characters of a human skeleton found beneath a stratum of chalky boulder clay at Ipswich." *Journ. Roy. Anthr. Inst.*, Vol. XIV, July-December, 1912; also *Proc. Prehis. of E. Anglia*, Vol. I. Part II, pp. 194-209.

parable to a modern English boy whose skeleton is preserved in the museum of this College. I estimate that the stature of the Wherstead neolithic lad was 3 feet 11 inches or 4 feet—1,200 mm. The stature of the modern lad is 4 feet 4½ inches—1,315 mm. It is impossible to give the exact length of the limb bones because, in most cases, the ends—epiphyses—are missing. The following table shows how the corresponding bones of the Neolithic and modern boy compare:—

	Neolithic.	Modern (R.C.S.).
Femur - - -	315 mm.	383 mm.
Tibia - - -	232 mm.	265 mm.
Clavicle - - -	104 mm.	107 mm.
Humerus - - -	248 mm.	267 mm.
Radius - - -	179 mm.	177 mm.

“Thus, although the teeth in these two individuals are at the same stage of eruption the two lads may not be of the same age; the Neolithic lad may be the more precocious in cutting his teeth. It is more likely, however, that the two may be of about the same age, and that the Neolithic lad is of a decidedly smaller and slighter make than the modern lad. The skull has been deformed by earth-pressure, so that one cannot give its exact dimensions. I infer that its maximum length was 194 mm. (average modern male, 190 mm.); maximum width, 138 mm. (average modern, 140 mm.); height of vault above ear passage, 118 mm. (average modern, 115 mm.); capacity, 1,500 cc. (1,480 cc. average for modern male). We have thus a lad with a relatively large head and brain, with a skull slightly longer, narrower, and higher than is common in England to-day, but of a form which is the prevailing type in the long or Neolithic barrows of England. There can be no doubt that the lad is of the ‘long-barrow’ type. There are certain measurements I desire to record so that they may be used for comparison in the case of other discoveries of this nature.

“Measurements of Teeth.”

“The width (interdental diameter) of the upper first incisor is 8 mm.; of the second incisor, 6·5 mm.; upper canine, 8 mm. (interdental) by 8 mm. (labio-lingual); first premolar, 7 mm.; second premolar, 7·2 mm.; first molar, 10·5 mm. (interdental) by 11 mm. (labio-lingual); second molar, 10 mm. by 11 mm.; third molar (unerupted), 7 mm. by 10 mm. These measurements present no exceptional feature. The teeth were all free from disease. The femur and tibia in most Neolithic skeletons are peculiarly flattened—the upper third of the femur from front (extensor) surface to back (flexor) surface; the tibia from side to side. In this lad the flattening is not present; it is possibly a character which appeared late in the growth of the Neolithic individual. The upper third of the femur in the modern lad had the following measurements: side to side, 28 mm. by 23·5 mm. (front to back); the corresponding measurements in the Neolithic lad were 19·5 mm. by 16 mm., the bones of the Neolithic lad being much less robust but not more flattened. As regards the tibia: at the junction of the upper with the middle third, in the modern lad the front to back diameter is 19 mm.; side to side, 15 mm.; in the Neolithic lad the corresponding figures are 14 mm. by 12 mm. The tibia of the latter is more slender and less flattened than that of the modern lad. One other feature—often observed in the Neolithic people of Britain—is the relatively long forearm.”

MESSRS. BOLTON AND Co.'s BRICKFIELD, IPSWICH.

On February 2nd, 1914, a gang of workmen were engaged in moving the sandy surface soil above the glacial gravel and decalcified crag in Messrs. Bolton and Co.'s lower brickfield, Ipswich, and a series of human skeletons pertaining either to the late Roman or Anglo-Saxon periods were discovered. The author was conducting

excavations at the base of the Red Crag below where the men were working when the first human bones were found, and was thus able to superintend the work of exhumation from the commencement. A very ancient-looking and doliocephalic skull cap was first discovered, together with a portion of a femur, at a depth of 4 feet 10 inches from the surface of the ground. These remains appear to be in a different condition to the remainder of the human bones found, and it is possible they belong to a more ancient epoch, but the discovery of a late burial ground in the immediate vicinity naturally makes such a supposition rather unsafe.

The burials occurred in rows extending from east to west and at a depth of about 3 feet to 4 feet 6 inches from the surface.* Very few cultural remains were found with the skeletons, but one small perfect urn, buried with a male skeleton, is of importance.

Mr. Reginald Smith, of the British Museum, has examined the urn, and has kindly given the author the following opinion of it: "Your pot, returned to-day, is Roman, and is clearly in imitation of cut-glass; we have nothing like it. The date depends to some extent on the kind of burial (cremation till about 250; inhumation, "250-400")" (Plate, Fig. 3(a)).

As the body with which this urn was found was not cremated, it is evident the Roman graves found are referable to the later date given by Mr. Reginald Smith. A number of fragments of Roman pottery were found in the diggings, especially in what appeared to be refuse pits to the west of the cemetery, but no coins of any sort were discovered. It seems that this burial ground may be associated with the Roman villa situated about one quarter of a mile to the north-west (the site is now occupied by a large farm-house known as "Castle Hill"). Excavations were conducted several years ago on the site of this villa, and in the Ipswich Museum there is a fine example of tessellated pavement and an amphora found during the excavations. But, unfortunately, no written record appears to have been kept of these discoveries.

Mr. John S. Corder, of Ipswich, has, however, been so good as to furnish the author with the following opinion: "My opinion is that it was a Roman villa of considerable importance and size, and it is generally understood that important functionaries had these residences in places where there were no actual Roman stations or Roman main roads, and acted as supervisors and tax-gatherers. It is obvious that though built on an elevated site there is no indication of any fortification or means of defence, and the structure would be purely a residential one."

The burial ground occurs on an elevated piece of ground overlooking the valley of the Gipping, and the graves were placed about 8 to 10 feet apart.

All the bodies were in the extended position, with the feet pointing to the east.

In one of the deeper graves a bronze brooch with an iron pin was found lying on the right pelvic bone of a male skeleton (vestiges of some fabric seemed also present), and this brooch Mr. Reginald Smith regards as probably of Anglo-Saxon age (Plate, Fig. 3(b)).

In another grave containing a very large female skeleton with the skull placed between the feet, two pieces of iron were found which Mr. Reginald Smith thinks may represent fragments of a lance-head.

Some idea can be formed of the archaeological richness of the valley in which Messrs. Bolton and Co.'s brickfield occurs, when it is remembered that up to the present it has furnished some of the finest Sub-Crag, Middle Glacial, and Boulder

*It was noticed that the infilling of the graves showed in many cases a rough stratification due apparently to the deposition of salts of iron, etc., in somewhat wavy lines.

Clay flint implements, together with many examples of worked flints, etc., referable to at least two of the later Cave Palaeolithic periods. The remains of the Ipswich skeleton were also found in the Middle Glacial sand-pit at the eastern end of the valley, and less than a quarter of a mile away these later human skeletons have now been discovered. The human remains were sent to Professor Keith, who has kindly furnished the following account of them.

*Report on Human Remains received from Mr. J. Reid Moir, Ipswich,
6th February 1914.*

"The circumstances under which these remains were found have been already described by Mr. Moir, the depth at which they occurred, the nature of the overlying strata, the posture of the skeletons, and the discovery of pottery of the Roman period. Altogether there were parts of at least seven individuals but of these only four had skulls sufficiently intact to give the three chief dimensions of the cranial cavity, maximum length, breadth, and auricular height.

"Only two had the facial parts complete. The age at which these people lived must be determined solely on the archaeological evidence. There are certain features of their teeth and jaws which have been observed only in people living in highly civilised communities. Their teeth were attacked by caries, there being two or three in each jaw showing large carious excavations in the crowns. In two jaws, both upper, the wisdom teeth had never erupted, although the individuals had long reached adult life, further the crowns of the teeth are less worn than in Neolithic, Bronze Age, or even Saxon communities, evidence in favour of their having lived on a cooked and prepared dietary.

"Amongst British skulls, attributed to a prehistoric or pre-Roman date a markedly prominent nose is very rare; I have never seen a single case. In one of the skulls unearthed by Mr. Reid Moir the root and bridge of the nose are remarkably prominent, forming a hawk-like projection between the orbital cavities. The outlines of the orbits are smooth and rounded, and the skulls and palates have the form and characters which we are accustomed to see in the remains of modern British communities.

"The condition of the teeth, nose, and face indicate a people who had lived for generations under civilised conditions.

"Amongst the bones unearthed was the roof part of a skull, a calvaria with fragments of long bones which were altogether in a different condition of preservation. The bones found with the Roman pottery are of a light brown or greyish yellow colour; they have the appearance and texture of hard chalk when broken across. The other remains, the calvaria just mentioned and adjoining long bones, are more eroded and of a deep brown colour. They appear to be older than those attributed to the Roman period, but how much older there is no evidence to show. The older calvaria differs in shape from all the others; it is narrow and long, maximum length 192 mm., maximum width 135 mm.; cephalic index 69-3, an extremely dolicocephalic individual. The bones are thick, the parietal on the roof measuring from 8 mm. to 9 mm. The markings suggest the female sex. Viewed from above all the skulls found exhibit very prominent parietal bosses or eminences; such eminences are lacking in the narrow elliptical pre-Roman calvaria. It is a form with which we are familiar in British Neolithic communities. We may presume that the long calvaria represents a native Briton.

"The other skulls bring up a much-discussed question; to what extent were new racial types introduced into Britain during the Roman occupation? I think that all who have investigated this matter are agreed that at least one type of skull

appears in Britain for the first time with the Roman occupation. This type is not difficult to recognise: it is long, usually 190-195 mm.; it is wide, 146-152 mm., but its roof, when the width and length are taken into consideration, is low.

"The auricular height varies from 112-120 mm. The type is long and wide, with a low, flat roof, a wide rather low forehead. But the parietal eminences are not usually prominent and marked as in these Ipswich skulls. The Ipswich skulls are, as regards absolute length and width, not very different from the Roman type.

"I now set down the chief details relating to each skull.

"No. 1.—Skull of an aged man. Maximum length, 195 mm.; width, 140 mm.; cephalic index, 71.8; height (supra-auricular), 116 mm.; cubic capacity, 1,470 cc.; minimum width of frontal, 96 mm.; width between angular processes of frontal, 108 mm. Palate, length 47 mm. (measured from incisor border to line joining hinder borders of last molars); width, 60 mm. (measured between outer borders of second molar teeth).

"*Note.*—As regards dimensions, shape and capacity No. 1 represents a very common modern English skull.

"No. 2.—Man probably between 30 and 40 years. Skull, length, 187 mm.; width, 148 mm.; cephalic index, 79.1; auricular height, 128 mm.; cubic capacity, 1,600 cc.; minimum frontal width, 98 mm.; a metopic suture is present, partially obliterated; width of face (bizygomatic), 135 mm.; length of upper face (nasionprosthion), 70 mm. Palate, length, 46 mm.; width, 58 mm.

"*Note.*—Also a common English form in modern times.

"No. 3.—Man probably 40 or over. Length, 189 mm.; width, 147 mm.; cephalic index, 77.8; auricular height, 128 mm.; minimum frontal, 95 mm. The thickness of parietal bone, 6 mm.; cubic capacity, 1,600 cc. Nose extremely narrow and prominent.

"No. 4.—Man over 40 years. Posterior or occipital part of skull is lacking. Width, 140 mm.; height, 120 mm. Thickness of parietal bone, 8 mm.

"No. 5.—Skull of a woman over 40 years of age. Length, 182 mm.; width, 139 mm.; cephalic index, 76.4; height, 111 mm.; cubic capacity, 1,220 cc.; minimum frontal, 96 mm. Between external angular processes of frontal, 102 mm. Face width (bizygomatic), 131 mm.; length (nasion-prosthion), 68 mm.

"As regards the stature and muscular development, it is to be regretted that,



Photo. F. Woolnough, The Museum, Ipswich

FIG. 4.—BRAMFORD ROAD ANGLO-SAXON SKELETON *in situ*.

although the skeleton was represented in each case, the long bones were so fragile and fragmentary that it was found impossible to obtain complete reconstruction.

"The men were not tall, their height appeared to vary between 5 feet 4 inches and 5 feet 8 inches, nor were their arm or leg bones of exceptional strength.

"Neither the tibia or upper third of the thigh bones show flattening of the type seen in remains of the Neolithic, Bronze Age, and (in some cases) of the Anglo-Saxon period."

BRAMFORD ROAD, IPSWICH.

A number of human skeletons were found in a digging on the property of the late Mr. Grimwood, of Ipswich. The discoveries were made on rising ground to the east of the Bramford road and the Gipping Valley. Unfortunately the majority of the skeletons were destroyed by the workmen engaged in the excavation, and only one was left *in situ* when the author was notified of the discovery. This skeleton, which was lying at a depth of about $2\frac{1}{2}$ feet from the surface of the ground, was carefully removed and forwarded to Professor Keith, who regards it as being of the usual Anglo-Saxon type (Text, Fig. 4).

No relics were found with the remains, nor were any apparently discovered with the skeletons dug up by the workmen.

The author wishes to offer his best thanks to Professor Arthur Keith, F.R.S., and Mr. Reginald Smith for all the help they have given him in compiling this note, and also to the owners of the Fonneceau and Wherstead estates for permission to conduct the necessary excavations.

J. REID MOIR.

Sierra Leone.

Migeod.

The Poro Society: The Building of the Poro House and Making of the Image. *By F. W. H. Migeod.* **61**

Poro is the great society of the Mende, a nation which occupies the eastern and larger part of the colony of Sierra Leone. It is commonly described by Europeans as a "secret" society. The male sex alone can belong to it, women having their own society. Occasionally long settled strangers are initiated, but only to the lower grades. The children of mixed marriages may also belong.

The series of small cuts Mendés have on their backs, down the spine and branching off on both sides, indicate that they belong to the society, and also the degree of initiation.

Some Mendés have never been initiated, possibly for the sole reason that they were taken from their homes as infants, and did not return till they were grown up. To these the name *Kpowa* is applied. Their backs are unmarked.

The society is one which has no equivalent in any modern civilised nation. It is at once a vast club with grades separated by rigid barriers; a political society; an educating board and school for boys; a religious body comprising laymen as well as priesthood; and it comprises also such guilds as those of dancers, medicine men, jugglers, acrobats, &c. All secular and religious knowledge and learning come within its scope. It practically represents the freedom of the nation.

Seeing that with few exceptions all male persons belong to it, to call Poro a secret society is somewhat of a misnomer. Practically it is only foreigners who are not allowed to know anything of its doings, except such as are public ceremonies, though it must be noted that each class or grade has its secrets from those of another grade. Each class or grade has its fees, which must be paid by those desiring admission.

The following is an account dictated to me some time since by a Mende who

has been with me a number of years, showing the manner in which the Poro spirit is given a local habitation and a name.

THE BUILDING OF THE PORO HOUSE AND MAKING OF THE IMAGE.

Ke nunga woveisia ti ngurui wai iuani, nguwe ifere,
And the old men they [had a place at] four large trees, two cotton trees¹
 ke mbere ifere, ngongo. I doi gore woma.
and two sasswood² trees, very big ones. It stood outside the stockade.
 Ke ti tokpo³ yase dewenga, ti kpate a kaha jongo.
And they cut oil-palm³ fronds, they made something like a basket.
 Ti peli mahaga ngongo hu, a li poro. Ti koko (= kokolo) yeyei
They cleared a big road inside to go to the Poro bush. They
 gbekpwa na sawa. Ti tokpo vengoi kia kaha⁴
stretched three bark ropes across. They took the woven palm like a basket.
 Ke ti ndekpea ngeya gbekpangoi ma yira. Ke ti kpoyoa.
And they leaned it on one of the three stretched ropes, and they finished.
 Ke ti wa gboma a tokpo vengoi kina kaha na.
And they came again with palm leaves worn like a basket.
 Ke ti ndekpea ngeya gbekpangoi ma. Ke ti kpoyoama.
And they set it against a stretched rope. And they finished on that.
 Ke ti yama gboma, ti wa tokpo vengoi kia kaha.
And they returned again, they came with a palm worn basket.
 Ke ti ndekpea gboma ngeyei yekpakolagema. Ke ti gboyoama.
And they leaned it also on the bottom rope. And they finished on that.
 Ke ti ya. Ngeyei lo ndogbo hu, mu yei ma tuli a ndimomoi.
And they went. There is a rope in the bush, in our country they call it ndimomo.
 Ke ti gbia ghotongo. Ti wala kamela.
And they brought plenty. They brought it to the Poro bush.
 Ke ti sia tokpo vengoi na ma, bi toa, be, kaha.
And they fastened the woven palm branches on it, [if] you saw it you would say,
it is a "kaha."
 Ke ti siama. Ti ngakpia.
And they fixed it on. They completed it.
 Ke ti tatoa yepeke na ma gboma, bi toa, be, kaha vengoi.
And they began on the other one next, if you saw it, you would say it is a woven
"kaha."
 Ke ti tatoa, ke ti ngakpia, ke ti yama. Ti tatoa ikpakolagei ma,
And they began, and they completed it. And they returned. They began
 bi toa, be, kaha vengo.
at the last one, if you saw it you would say it was a woven kaha.
 Ke ti siama, ti ngakpia. Ke ti na gboyoama.
And they fastened it, they completed it. And they finished on that.
 Ke ti pei (= pelei) huma kama yitiya, bi toa kia kikiri na.
And they measure the house in the poro clearing, you see it was round.
 Ipei tato, a fo yakpei ti kpoyo. Ke ti pei huma na.
The house begins, on one single day they finish it. And they measure the house there.
 Ta li ngeya deme na. Ta li jaiya deme na.
They go to cut rope there. They go to cut wattles there.
 Ta li njasea deme na. Ta li poro bome na.
They go to cut thatch there. They go to dig clay there.
 Ta li poro wuame na. Ta li nja wulime, ta wala.
They go to mix clay there. They go to draw water, they bring it.

Ta pu pore hu na. Ta li dingboi deme na.
They pour it on the clay there. They go to cut posts there.
 Ta li pojunge deme na. Ta li kpura⁵ deme.
They go to cut rafters there. They go to cut canes.
 Ke ti ngeya debra nu longa ti duli ma, ke ti wa.
And they sent a man to call the rope cutters, and they came.
 Ke ti nu longa njasa lebra gama, ke ti wa.
And they sent a man to the thatch cutters, and they came.
 Ke ti nu longa dingbo debra gama, ke ti wa.
And they sent a man to the post cutters, and they came.
 Ke ti nu donga ngeya debra gama, ke ti wa.
And they sent a man to the rope cutters, and they came.
 Ke ti nu longa poro bo beleisia gama, ke ti wa,
And they sent a man to the clay diggers, and they came.
 Ke ti nu longa poro wua beleisia gama, ke ti wa.
And they sent a man to the clay mixers, and they came.
 Ke ti nu loa pojunga debra gama, ke ti wa.
And they sent a man to the rafter cutters, and they came.
 Ke ti nu loa kpura debra gama, ke ti wa.
And they sent a man to the cane cutters, and they came.
 Ke ti kpele ti gomea. Ke ti ndowe bongu ipu mahu fere.
And they all collected. And they dug holes twelve [in number].
 Ke ti towe hitenga, ipu mahu fere. Ke ti gbeme yilinga.
And they let down into the holes the twelve forked posts. And they tied the beams on them.
 Ke ti gboyoa. Ke ti ndia hongu a kpulai.
And they finished. And they secured them in the middle with cane.
 Ti ngeyei bumbu ti ngili la, ke ti nda ikoye yira.
They take rope to tie with, and they lay one strand [close to the ground].
 Ke ti ngeyei bumbua, ke ti ngilia, ke ti kpoyoa.
And they took rope, they tied it, and they finished.
 Ke ti jaiya lebra ke ti lulinga, ke ti wa. Ke ti tatonga a jaiyala.
And they called the wattle cutters and they came, and they began to tie the wattles.
 Ke ti jaiya, ti kpoyoa. Ke ti pojunga lebra lulinga,
And they intertwine the wattles, and they finished. And they called the rafter cutters.
 Ke ti wa. Ke ti pojuanga, ke ti kpoyoa.
And they came. And they put on the rafters, and they finished.
 Ke ti dingbo lebra lulinga. Ke ti toa indiei a ngeleya we,⁶
And they called the post cutters, and they set the middle one up,
 ke ti kpoyoa. Ke ti nu longa kpa lebra gama.⁷
And they finished. And they sent a man to the lath cutters,
 Ke ti kpa ke ti kpoyoa. Ke ti nu longa poro wua bela (or, b'ra) gama.
And they tie the laths, and they finished. And they sent a man to the clay mixers
 Ke ti pore mbelia. Ti mbelia ti pua pe yekohui.
And carried the clay. They carried, they put it down inside the house.
 Ke ti mahoa. Ke ti kpoyoa. Ke ti njase lebra lulinga.
And they plastered, and they finished. And they called the thatch cutters.
 Ke ti dea yengombe (= ingombe), ke ti tatoa a madela a hele yase.⁸
And they climbed on to the roof, and they began to cover it with hanging thatch.
 Ke ti madea, ke ti kpoyoa. Ke ti pe ndame gbatea,
And they thatched it, and they finished. And they made the doorway,

ke ti kpoyoa a ngi ndei. Ke ti nete venga, ti gboyo.

And they finished that part. And they wove the door and finish.

Ti to nda. Ti ngili a mbalui.⁹ Ti ngili ndiei yira,

They stand it in its place. They tie it with mbalu-rope. They tie it with a rope in the middle.

Ti ngili mahu yira. Ti ngili ikoye yira.

They tie it on top. They tie it with one rope at the bottom.

Ke ti kpoyoa. Ti ngeyei do indiei, ti ngului wumbu,

And they finished. They put a rope in the middle, they take a stick,

ti ngua hu. Ke ti kpoyoa. Ke ti kponga, te,

they thrust it in. And they finished. And they locked it, saying,

ngafa we mia ti tonga. Te, a wa,

it is a spirit's house they have built. They said, come,

wu ngafei hokpa hugbia. Ke ti wa a ngare yira.

bring out your present. And they came with one mat.

Ke ti wa a konde gule. Ke ti wala yira, te, ha nani mia.

And they brought a country cloth. They brought one. They said it is four "ba" [in length].¹⁰

Ke ti nda ngale hu. Ti fe konga we ti ngafa we doni.

And they laid it on the mat. They give it to the young men who built the spirit's house.

Te, ngafe mia ma hokpa hu gbia.¹¹ Te, mu kurua.

They said, it is a present from the spirit we give you. They said, we accept it.

Ke ti na gboyoama a fo yira. Ke ti yama nunga wawa gama.

And they finished on that in one day. And they returned to the big men.

Te, a mu gbanduinga gbate. Ke ti ti molia,

They said, let us make a sacred place. And they asked them,

te, ma gbate mi lo? Te, njahu weli hu nga.

they said, where shall we make it? They said, along the water road.

Te, a li njahu weli hu. Wu kowoi gbe nguru wai na bu,

They said, go along the water road, you look to the left under that big tree,

wu haga na. Ke ti na haga, ke ti gboyoa.

you clear the ground there. And they cleared there and they finished.

Ke ti wa tei hu. Ti nde nunga wawaisia ma, te,

And they come into the town. They say to the big men, they say,

Mu gboyoa a nguru wai bu hagala. Te, ma ye pe?

We have finished clearing under the big tree. They said, what shall we do?

Te, a nunga gbiakpia hu. Ke ti nunga gbiakpia hu.

They said, pick out some men. And they picked out some men.

Ti na do nguru deme. Ti na do njasa deme.

They sent some to cut sticks. They sent some to cut thatch.

Ti na do ngeya deme. Ti na do pojunga deme.

They sent some to cut rope. They sent some to cut rafters.

Ti na do dingbo deme. Ti na donga ngeya deme.

They sent some to cut [long] posts. They sent some to cut rope.

Ti gokolia hu. Ti hea, ta ti mawulo. Ke ti ya,

They divided them out. They sat down to await them. And they went,

ti wa a fo ngundiei. Ke ti ya a njase njahu weli hu nga.

they came at midday. And they went with the thatch along the water road.

Ke ti wala nguru wai bu. Ke ti wa a ngului,

And they brought it under the big tree. And they came with the sticks.

ti la njahu weli wunga. Ke ti yala nguru wai bu.

they laid them in the water road. They took them under the big tree.

Ke ti ya a pojunga njahu weli hunga, ti lila nguru wai bu.
And they went with the rafters to the water road, they took them under the big tree.
 Ke ti wa a ngeyei ti lila njahu weli wunga, ti la nguru wai bu.
And they brought the rope, they took it along the water road and laid it under the big tree.

Ke ti wa a ngeyei, ke dingboi ti makpoa,
And they brought rope, they tied it to the posts,
 ke ti ya a venja ngeyei ke dingboi, ti yala njahu weli wunga.
and they took both rope and posts, they took them along the water road.

Ti lila nguru wai bu. Ke ti pei huma.
They took them under the big tree. And they mark out a house.

Ipei ti toni a kpekpe lo. Ke ti ndowe bonga,
The house they built was to be square. And they dug the holes,
 ti kpoyo, ibeka pu, ikakei ji ma pu, ke dingboi dome fere.
they finish, ten this side, ten that side, and two standing places for the long-posts.

Ta mia i ke numu yira gboyongo mahu fere. Ke ti hitia hitia.
So it showed twenty-two. They they put each in [his hole].

Ti mbimbi ti kome. Ke ti ngumba hongga.
They pass round, they meet. And they put on the ridge beam.

Ke ti pojunga, ti kpoyo. Ke ti kpanga a nguru mumui,
And they laid the rafters, they finish. And they laid small sticks for cross laths,
 ti kpoyo. Ti madea a tivoi.

they finish. They roofed it with cross-wise laid palm thatch.

Ke ti madea, ke ti kpoyoa. Ti mahoni, ke ti kpoyoa.
And they thatched it, they finished. They plastered and they finished.

Ke ti ya, ti nde nunga wawaisia ma, te,
And they went, they said to the big men, they said,
 a ngafe hokpa hugbia. Ke ti molia, te, gbe hai va ?
bring out the spirit's present. And they asked, saying, What for?

Te, mu gbanduina gboyua. Ke ti wa ngare yira,
They said, we have finished the sacred place. And they brought one mat,
 ke kule yira, ma tuli a konde gule, ba nani,
and one cloth, we call it country cloth, four "ba" long,
 ke ti nda ngale hu, ti fea kongga we, te
and they laid it on the mat, they gave it the young men, saying,
 ngafe mia ma hokpa hugbia. Te, mu kunga (= kurunga).
it is the spirit's present we bring out to you. They said, we accept it.

Ke ti na gboyoa a ngi ndei. Ke ti ya kolo debra gama.
And they finished that part of the work. And they went to the bark [or—skin] cutters.
 Te, mu wa, bi pore ngui gbate mu ye. Ye, ngi loko lo ma.
They said, we come, make a Poro head for us. He said, I agree [lit. his hand on it].

Ye, a li wu yi nani, wu wa poma. Te, mu kurua.
He said, go away and sleep four nights, and come back. They said, we agree.
 Ke ti ya ti yi nani. Ke ti wa na, te, mu wai.
And they went they slept four nights. And they came now, saying, we come.

Ye, hakei ge, we, ngi gbate, ngi kpoyoa a kpatela.
He said, the thing the other day, you said, I must make, I have finished making it.
 Ye, a wa wu nya pawa. Te, a gbe jongo? Ye, navo yira.
He said, come and pay me. They said, how much? He said, one head of money.
 Te, navoi gbotongo, maye kru. Ye,
They said, the money is a lot, reduce it a little. He said,

ke a nya go a navoi yekuti. Te mu kurua.
then give me half. They said, we agree.
 Te, ti wa gbale sawa, ke ti fea ngi ye.
They said they had brought three "gbale" [of cloth],¹⁰ and they gave him.
 Te, mua mia ma bi pawa. Ke i wa a Poro wui gbatengoi.
They said, here we are we pay you. And he brought the Poro head made.
 Ke i fea ti ye. Ye, wu hakei mia. Te, mu kurua.
And he gave it them. He said, this is your thing. They said, we accept it.
 Ke ti yama tei hu. Ke ngele wa, ke ti pore dea kamela.
And they returned to the town. And next morning they passed with the Poro to the Poro bush entrance.
 Ke numu gbi ke ti dea kamela, ti Poro wui magona.
And everybody passed to the Poro bush entrance, they made obeisance to the Poro head.
 Ke ti magona, ti kpoyoa. Tei gbi, te, mu kurua.
And they saluted, they finished. All the town said, we have accepted it.
 Ke ngele wa, ti wa a mbili wai, ke sangbwe, ke nyene,
And next morning they came with a big drum, and small drum, and (?) rattles,
ke susui, ke yianje, ke ti kpele ti dea kamela.
and castanets, and cymbals, and they all passed to the Poro bush.
 Ke Pore i ngi mayilinga. Nunga gbi tei hu, ke ti lekpia.
And the Poro dressed himself. Everybody in the town stood in line.
 Poro i do kulo. Ke ti ya tei hu dulime.
Poro stood in front, and they all went into the town to dance.
 Nyahanga ti gbi ti gohu nengo.
All the women rejoiced [lit. Their belly was sweet].
 Ti luvu dulime ghen. Ke ti kpoyoa a kpoko voloi.
They spent the whole day dancing, and they finished towards sunset.
 Ke i yama kame hu. Ke na i gboyoa a ngi ndei.
And he returned inside the Poro bush. And that part was finished.
 Ke ngele wa, ke ti nunga wawaisia molinga, te, ngafe ji gbenge
And next morning they asked the big men, they said, this spirit yesterday
i wa be dulime, ngi biyei? Ke ti ngi molia.
who (= he) came to dance, what is his name? And they asked him [i.e., the
chief].
 Ye, ngi biyei a Goboi. Ye pekei mia a Povuli,¹² ye pekei mia a
He said, his name is Gorboy. Another name is Porvoolee. His other is
Gbeni. Ye, mbiye mia ngi fe ngi ye sawai na. Ke i gboyoa.
Gbennee. He said, those are the three names I give him, and it was finished.
 Ye, tamia, numui gbi wa ngi lulila. Ye, fale, i gboyoa.
He said, so it is, you all shall call him so. He said, there it is, it is finished.
 Ye, mu gele mia lo. Ina i gboyoa a ngi ndei.
He said, we have finished with it. That part was finished.

[FIRST DAYS DICTATION FINISHED AND RESUMED.]

Ngafe yepe benge a kpokoi i gboyoi,
Our talk yesterday evening about the spirit was finished,
 ta mia mu tatoma. Ngi biayei, bi toa, kena nguru mayilingo.
so it is we are beginning again. Its appearance, you see, was like a dressed-
up stick.
 Ke nguru i le. I wa lo loi yehalage makuhango.
But it was not a stick. It came on the first day very tall.

I yama lo mu yi na woma sawa. I wa gboma kutungo.

It came back after we had slept three nights. It came again short.

I yama gboma kamehu. I wa lo na woma, i kutu, i guhani.

It returned again to the Poro bush. It came after that. It was not short, it was not tall.

Bengo hu kpi. Ke ti loe denga, te,

It was a medium size. And they passed over a day, they said,

sina yakpe a gbia hu. Te, gbi wu gome, te,

to-morrow only is cut out. They said, all of you assemble. They said,

ma sawa la. Ke ngele wa ke ti gomea.

we are going to lay down a rule. And next morning they all assembled.

Te, ngafe mia mu kpatea i gbia tei hu dulime,

They said, the spirit that we have made [when] it comes out into the town to dance,

i gula lo, nyahanga gbi ti wa pebu.

if it falls down, all women must go indoors.

Hinga wu lekpe, wu bumbu, wu lila kamehu.

Men you fall in, you pick him up, you carry him to the Poro bush.

Te, ina i kula weli hu, te, wa Kate¹⁰ nani

They said, if he falls down in the road, they said, bring four "kate" of cloth,

wu fe te ipekei na hu bela we. Te, i ya te yepekei na be hu

you give them to the people of that town. They said, if now he goes into another town

dulime, i gula lo, tia be ta kate nani ti fe ijia we.¹³

to dance, and he falls down, they also will give four "kate" to these.

Ke poro mahanga ti ndenga konga ma, te,

And the Poro chiefs said to the young men, they said,

sawei mia mu ndani, te, wu kurua?

the rule we have laid down, they said, do you accept it?

Te, i. Te, mu loko lo na.

They said, yes. They said, our hand is on it.

Ke ti na gboyoama a ngi ndei.

And they finished that part.

NOTES.

¹ *Bombaces.*

² *Erythrophloeum guineense—Leguminosæ.*

³ *Elais guineensis—Palmae.*

⁴ *Kaha* is an open basket-like structure about 4 feet by 1½ feet by 1½ feet, carried on the back, in which produce for the market is packed. It would appear that the constructions erected after the shape of a *kaha* were shelters for the old men to sit under whilst they supervised the work.

⁵ *Kpura* is a climbing plant used for rope. It is a kind of rattan.

⁶ The speaker lost his reckoning. He ought to have mentioned the central post before the rafters.

⁷ These sticks—thin ones—go across the rafters.

⁸ In laying thatch this way the palm branches hang lengthwise.

⁹ *Mbalu* is a cane used for rope.

¹⁰ A *ba* is a cloth measure and represents a piece 2 fathoms long, i.e., the spread of both arms twice. It varies with the width:

1 kate = 6 bale.

1 bale = 2 ba.

1 ba = 2 fathoms.

¹¹ *Ngafe hokpa hugbia.* This has been explained to me as meaning, though I cannot be absolutely sure of it, "to pull the contents out of the spirit's nose." It is an idiomatic expression asking for a present for service rendered. Something as small as the ejection from the nose is all that is asked; but of course the humility of the request must not be interpreted too precisely when the present is made.

¹² *Poruli* = ? *Poro ruli* (= *rului*), i.e., Poro himself.

¹³ With reference to paying a forfeit for falling down, compare *George Grenfell and the Congo*, p. 252, by Sir H. Johnston.

F. W. H. MIGEOD.

REVIEWS.

India : Religion.

Macnicol.

Indian Theism from the Vedas to the Muhammadan Period. By Nicol Macnicol, M.A., D.Litt. Oxford University Press, 1915. Price 6s. net **62**
(The Religious Quest of India.)

The Oxford University Press is to be congratulated on the publication of a series of manuals discussing the phases of Indian religious thought. The object of the series is twofold: First, to illustrate in a sincere and sympathetic spirit the perplexingly involved developments of religious thought in India; secondly, to set each form of Indian religion by the side of Christianity in such a way that the relationship may stand out clear. The first object, that is to say, a historical review of the growth of the theistic idea, is one which commends itself to all students of Comparative Religion, and may be usefully discussed in these pages; the second, being devoted to Christian propaganda, is necessarily controversial, and thus stands outside the aims of this journal. It may, however, be said that the treatment of such a subject by a writer who combines an adequate knowledge of the literature and the command of a polished style marks what is almost a new development in missionary methods. If Hinduism is to be encountered and refuted on its own soil, the advocate of the claims of Christianity must first endeavour to understand the views of his opponents, and must attain a dispassionate knowledge of the philosophy which underlies the strange medley of beliefs and ritual on which this, one of the great religions of the world, is founded.

Dr. Macnicol's opening chapters take the form of a historical review of the diverse phases of Hinduism, with a view to tracing the circumstances under which the conception of monotheism, a living and still increasing development of the faith both of the philosopher and the peasant, has progressed.

To begin with the Rig Veda—Varuna, god of the wide firmament, of day and night, holds a leading place. There is, as Dr. Macnicol admits, much in the hymns devoted to this deity which recalls the lofty language of the Hebrew seers and psalmists. In particular, he is often conceived as a controlling Providence, the searcher of his servants' hearts, the father of their spirits. But too much stress must not be laid on language of this kind in face of the fact that while among the people of Irān the primitive Aryan doctrine became ethical, optimistic, distinctly unphilosophical, in India, possibly as the result of a change of environment and contact with aboriginal races professing a crude form of Animism, it tended to become monistic, pessimistic, persistently speculative. At the same time another tendency was developed, that called by Max Müller henotheism or kathenotheism, the belief in individual gods alternately regarded as the highest. In other words, the poet, swayed by the impulses of the moment, is inclined to exalt to a position of superiority the special god to whom at the time his devotions are offered. This may in time lead to monotheism, but it is not monotheism in the sense in which it is regarded by later controversialists.

The pure nature worship of the Vedas, probably under the increasing control of the environment and the growth of pessimism produced in an age of political unrest, with its natural results on the economics of the people, gave rise to what is called Brahmanism, the exaltation of the professional priest and his ritual at the expense of true devotion. This system was obviously opposed to monotheism, and we need not expect to find many traces of this doctrine either in the ritualistic treatises or in the philosophical discussions, which were in the main pantheistic.

But this absorption in a formal ritualism led to a reaction against Brahman pretensions on the part of the Kshatriya or higher laymen of the community. It seems to have been under their auspices that the doctrine of Bhakti or intense

devotion to a single god, found its origin, and it was in the Kshatriya land of Bihār, not in the Holy Land of the Brahmans along the upper courses of the rivers Ganges and Jumna, that Buddhism took its rise. As formulated by its founder, Gautama Buddha, this was distinctly atheistic. But in its later development it replaced the rather dreary theology of its founder by a devotion towards his personality as a guide and helper of the weary, almost helpless, worshipper.

In this form Buddhism was the precursor of the later cult of Vishnu, originally a Vedic sun god, who came gradually to assume the position of a guide and personal saviour. Brahmā, it is true, might at one time have occupied this place in Hinduism, but his cultus was overwhelmed by that of the sectarian deities, and he is now little more than a *roi fainéant* who stands aloof from human passions and aspirations.

The next important development came from Southern India, in the personalities of Sankara and Rāmānuja. Sankara devoted his splendid powers of philosophical thought to the extension of Saivism. But under the teaching of Rāmānuja the personal factor in Vaishnavism was enforced. The doctrine of the Avatāras, or successive incarnations of the deity, provided a convenient mode of assimilating divergent cults and doctrines. In Krishna and Rāma, both in their origin deified heroes, the needs of those who craved for a personal deity were satisfied.

The further developments of this doctrine among the Vaishnavas are carefully traced by Dr. Macnicol. Hinduism by the teaching of this school became democratized; it was no longer confined to Brahman or Kshatriya, but men of low estate—the currier, the barber, the weaver, from whose ranks many of the disciples of Rāmānanda were drawn—shared in the work of popularisation. In this development the leading figures are Kabīr, whose sententious aphorisms are on the lips of every peasant in Northern India; his disciple Nānak, the apostle of Sikhism; Chaitanya, the saint of Bengali Vaishnavism; Mīra Bāi, the sweet singer of the erotic doctrine of Krishna; and Tulsi Dās, who by his translation of the Rāmāyana supplied the masses with their Bible.

This tendency in the direction of monotheism was stimulated by foreign influences. Christian Portuguese missionaries in Western India and the Muhammadan conquest of the north, which brought in the cold, clear-cut monotheism of Islām, could not fail to impress their influence on the ill-organised system of Hinduism. Dr. Macnicol hardly lays sufficient stress on the change of view among the modern peasants of the Panjab and the United Provinces of Agra and Oudh. The names of Nārāyan or Vishnu and Parameshwar, “the Great God,” are ever on their lips, and when they salute a friend it is in the words “Rām! Rām!” Of course, with his marvellous eclecticism, the peasant of to-day bows before the images of the sectarian gods, the sun, the holy tree, the sacred cow, the tomb, which is often that of a Musalmān martyr who died in persecuting Hinduism; but this he does not find inconsistent with his instinctive monotheistical feeling.

The future development of Hinduism is a matter of pure speculation. It may break up into a body of divergent sects, or some great teacher, a second Buddha, Kabīr, or Nānak, may effect its purification and reorganisation. In this struggle Christianity is certain to play a leading part. But the Indian Church of the future will probably assume an oriental form, and its doctrines will bear the impress of Vedantism and Bhakti. Meanwhile, both for the statesman and the missionary the one thing needful is to study Hinduism, not in the spirit of the fanatic, but with respect and sympathy. For this investigation Dr. Macnicol has provided valuable materials, and the spirit in which he discusses a religion to which he is strenuously opposed is highly to be commended.

W. CROOKE.

Balochistan.

Bray.

The Life-history of a Brāhūi. By Denys Bray, I.C.S. London: R. Asiatic Soc. 1913.

63

In this little book Mr. Denys Bray has given in homely idiomatic English, well suited to its subject, the narrative which he gathered from the lips of Mirza Shēr Muhammad Zahri, a Brāhūi of Jhalawān. Here we have in detail the events which accompany a Brāhūi from birth to burial, as told by one who has been through the whole, and not as noted down by an alien observer, and it is such a record as we should be glad to have for every primitive or barbarous race, but mostly hope for in vain. Personally, I may add that I have read it with great pleasure, although I can claim no more than a bowing acquaintance with Brāhūis, having looked at them through a Baloch medium, and having never had an opportunity of learning their interesting language. Mr. Bray has already in his work on this language, and in the Census Report of Balochistan (1911), shown his intimate knowledge of this race and their neighbours, and without such knowledge the present work would have been impossible. This valuable record has been made none too soon. Customs are changing rapidly, and, as the narrator frequently complains, the men are abandoning their primitive usages, which, as elsewhere, find a refuge only among the womankind. The mass of detail is great; strange and interesting customs meet one at every turn. For instance, under the head, "Burial," we are told that a man's grave should be as deep as a man's middle, and a woman's as deep as a man's breast, and also that it is a good sign if the earth is found to be soft in digging a grave, but evil if it is hard and stony, for it shows that the earth is unwilling to receive a wicked burden. And the extraordinary custom in connection with miscarriage given in Section 11 is, perhaps, unparalleled. The Brāhūis, in spite of their Dravidian speech, are a very mixed race, containing undoubted North Indian and Iranian elements, and the language itself, as Mr. Bray has shown in his Census Report, is in an unstable condition, apt to be encroached on by Jatki and Balochi. Long ago in the seventies, when I met the then Khān of Kalāt Mir Khudādād Khān and conversed with him in Balochi, I learnt that though he was a Kambarāni Brāhūi living in a Brāhūi-speaking tract, yet Balochi was the language of his family; and we learn now through Mr. Bray that the Brāhūis themselves consider their language unsuitable for poetry and make use of Balochi, and occasionally of Dēhwāri (a dialect of Persian) for their ballads and nursery rhymes. Yet perhaps it is not Balochi but the rude Jatki or Lahndā speech that is destined to supersede Brāhūi, and not impossibly Balochi as well.

In conclusion, this little book can be heartily recommended to all students of custom as not only of the greatest value, but also extremely entertaining.

M. LONGWORTH DAMES.

Sociology.

Ford.

Blackmar, and Gillin.

The Natural History of the State: An Introduction to Political Science. By Henry Jones Ford. London: Princeton, University Press. Milford, 1915. Price 4s. 6d. net.

64

Outlines of Sociology. By Frank W. Blackmar, Ph.D., and John Lewis Gillin, Ph.D. New York: Macmillan Co. 1915. Price 8s. 6d. net.

Both these volumes are, in a broad sense, of interest to Anthropologists. Their merits, however, in the handling of anthropological data are far from equal. The aim of the first-named is to demonstrate the connection between Darwinism and politics by showing that of Darwin's alternatives of individual variation and variation on lines of community, the latter, which the author calls the social hypothesis, is supported by the biological, psychological, linguistic, and anthropological evidence;

the conclusion being that as long as man has been man he has been a member of a society. To most readers it is to be feared that the author will appear either to have missed his mark or to be labouring the obvious.

In the second named—a text-book for students—more than one-third is devoted to a consideration of social origins; the authors give a comprehensive survey of the material furnished by anthropology towards the elucidation of the specific problems of sociology. Those who wish to obtain a grasp of the broad principles governing the sociological application of the detailed information which it is one of the functions of the anthropologist to collect, examine, and classify, could not do better than consult this volume. E. N. F.

ANTHROPOLOGICAL NOTE.

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(Donor indicated in parentheses.)

Social Progress and the Darwinian Theory. A Study of Force as a Factor in Human Relations. By George Nasmyth, Ph.D. $7\frac{1}{2} \times 5\frac{1}{4}$. 397 pp. **65**
G. P. Putnam's Sons. 7s. 6d. net. (The Publishers.)

Scythians and Greeks. A Survey of Ancient History and Archæology on the North Coast of the Euxine, from the Danube to the Caucasus. By Ellis H. Minns, M.A. $11\frac{3}{4} \times 9\frac{1}{2}$. 662 pp. 9 Plates. 9 Maps and Plans. 351 Illustrations. Cambridge University Press. £3 3s. net. (The Publishers.)

Indian Prehistoric and Protohistoric Antiquities. Notes on their Ages and Distribution. By Robert Bruce Foote. $9\frac{3}{4} \times 6\frac{1}{2}$. 226 pp. 64 Plates and Map. Government Press, Madras. (The Superintendent.) 14s. 8d.

The Moorish Conception of Holiness (Baraka). By Edward Westermarck, Ph.D., LL.D. 153 pp. Akademiska Bokhandeln, Helsingfors. (Author.)

Side Lights on the "Dravidian Problem." Some Suggestions on the Study of South Indian Ethnology. By F. J. Richards, I.C.S. $10 \times 7\frac{3}{4}$. 47 pp. (The Author.)

The Shans. Vol. I. By W. W. Cochrane. $9 \times 5\frac{1}{2}$. 217 pp. Illustrated. Government Printing, Rangoon. (The Secretary of State for India.)

L'Autriche et la Hongrie de Demain. Les différentes Nationalités d'Après les Langues Parlées. Par A. Chervin, ancien Président de la Société de Statistique de Paris et de la Société d'Anthropologie. $11 \times 7\frac{1}{4}$. 119 pp. Avec de Nombreux Tableaux Statistiques et 6 Cartes Ethniques. Berger-Levrault, Libraires-Éditeurs, Paris. 3 fr. 50. (The Author.)

The Universal Mind and the Great War. By Ed. Drake. $7 \times 4\frac{3}{4}$. 100 pp. C. W. Daniel, Ltd. 2s. 6d. net. (The Publishers.)

An Introduction of the Grammar of the Tibetan Language. With the Texts of Situhl Sum-r Tags, Dag-je, Sal-wai, Me-long, and Situhl Shal-Lün. By Sarat Chandra Das, C.I.E. $11 \times 8\frac{3}{4}$. Darjeeling Branch Press. 15s. (Lieutenant-Governor of Bengal.)

Central American and West Indian Archæology. Being an Introduction to the Archæology of the States of Nicaragua, Costa Rica, Panama, and the West Indies. By T. A. Joyce, M.A. 9×6 . 263 pp. With a Coloured Frontispiece, 28 Plates in Half-tone, Text Illustrations, and 2 Maps. Lee Warner. 12s. 6d. net. (The Author.)

Intercourse between India and the Western World from the Earliest Times to the Fall of Rome. By H. G. Rawlinson, M.A., I.C.S. $9\frac{1}{4} \times 5\frac{3}{4}$. viii + 196 pp. With 4 Illustrations and a Map. Cambridge University Press. 7s. 6d. net. (The Publishers.)



FIG. 1.—WEST COAST NATIVES.



FIG. 3. NATIVES NEAR OUBATCHE.



FIG. 2.—NATIVES OF GUARÚ, WEST COAST.



FIG. 4.—BILU, NATIVE OF NORTH OF
EAST COAST.

ORIGINAL ARTICLES.

With Plate H.

New Caledonia: Ethnology.

Macmillan Brown.

Notes on a Visit to New Caledonia. By J. Macmillan Brown.

66

Though the nearest to Australia of all the Melanesian islands, New Caledonia has attracted little attention from British ethnologists. They have studied with some care the culture of the New Hebrides; but this, the most westerly and the most southerly of that group, they have practically neglected, partly because it is French and partly, doubtless, because the passenger tariff (at the rate of 4*l.* a day for the voyage) is almost prohibitive.

Having spent a winter in the Solomon Islands and one in the New Hebrides, I felt bound to complete my personal study of Melanesia by a visit to New Caledonia. After my visit this last winter I have come to the conclusion that there is, ethnologically speaking, no more interesting island in the whole of Melanesia.

It reveals even more clearly than Malaita, in the Solomons, how deeply Polynesian immigrants have impressed themselves on these islands. The contrast between the natives of the east coast and those of the west coast in hair, physiognomy, and stature is very striking. Even if my photographs of the people of the two coasts had been unmarked, I could easily have apportioned them to their locality. On the west the negroid face and hair predominated, though it was difficult to say whether the tall or medium stature or the pigmy marked the majority. On the east coast the finer features and the taller stature of the Polynesians were strikingly more apparent; and the tufts of the original negroid hair were lengthened out into curls or long undulations. The skin, too, was generally lighter in colour, though there were differences on both coasts according to the latitude. The photograph (Fig. 1 of Plate) was taken on board the coastal steamer on the west coast; the figure on the left side is that of a native from the shore, and shows clearly the exaggerated negroidism of many of the aborigines. Fig. 2 was taken in the winter forest about a hundred miles north-west of Noumea; it was difficult to get these women to stand; and the old lady balked me by turning her face down to the child at the root of the tree just as I was clicking the exposure. Both children were crying bitterly at the sight of a stranger. The party was from the native village of Guarû, which I had just visited. I could recognise in many of these natives of the west coast a close resemblance to the last Tasmanians who died in the third quarter of last century.

The photograph (Fig. 3 of Plate) shows a complete contrast in both mother and children; the face and hair have been largely stripped of excessive negroidism, and the children were unalarmed, although they belonged to a village even farther in the bush and farther away from Noumea. Fig. 4 is the picture of my guide, Bilu, who led me to this village, far off the ordinary route of European traffic. It was on the east, away up in the more tropical north, near the reef anchorage called Oubatche. His face and hair tell their own story, and the story of the east coast and its Polynesian saturation. He was very intelligent, and, happily could speak a little French, so that I was able to get a great many of the words of his village language. The word for tribe was *Waka*, and this also was the name for boat. This identity with the Polynesian word for canoe confirms many other indications that it was Polynesians who introduced the tribal system.

The linguistic condition is the same as in the matrilineal New Hebrides; every village has its own language, which is not easily intelligible to its neighbour, however close. This is the usual result of matrilineal exogamy and division into kins or clans. Property and power can never accumulate sufficiently in any family to allow of conquest or amalgamation of villages or territories. Wherever this multiplicity of languages prevails in an island, it is a sure sign of kin-division and mother-right.

But here, in New Caledonia, we have father-right, and tribal division with hereditary chiefships. Evidently there has been a substitution of one social system for the other, and that in times too recent to allow of the new having its full effect in destroying the network of barriers that divided every village from every other. Amalgamation had begun to take place along the valleys of some of the northern rivers, and in the island of Belep to the north-west, before Europeans arrived. But the process had not gone far. The last and most powerful Polynesian incursion must have been comparatively recent, like that into Uvea, of the Loyalty group, to the east, which is said by tradition to have taken place about a hundred years ago. That it changed the social system in each village, indicates its warlike character; that whilst introducing many Polynesian words it failed to change the phonology, indicates its purely masculine character. The native mothers moulded the speech-organs of the boys, whilst the alien warriors, who were their fathers, moulded their vocabulary. The change of customs was almost wholly confined to the employments and arts of the men, like the making of houses, fishing, navigation, and carving. The women continued to bake their frail pottery, an art which the Polynesians never knew; they continued their old arts of cultivation, their taro and yam-irrigated terraces; they continued to use the fibre of certain plants and trees to make their mats, girdles, and headresses, but failed to take up the Polynesian women's art of beating out the inner bark of certain trees into tappa; it was the men who did this work, and made the *buangui* from the bark of the *banian* tree. The steam-oven or earth-oven, so distinctive of Polynesia, must have been introduced at a far earlier period, as in the New Hebrides, by desultory Polynesian immigrations of both sexes.

There is a definite tradition in the neighbouring Isle of Pines that it was the Polynesians that introduced the double canoe and taught the art of making it, as well as the art of steering by the stars. Yet the New Caledonians, though islanders always, never became oceanic sailors, and soon lost the art of the double canoe; they had not the hardy boldness and courage that a subsiding fatherland in the middle of oceans had given to the Polynesians. They learned the art of carving in wood from the newcomers, for it was as a rule confined to the chiefs and the decoration of the houses of chiefs; each of the latter was distinguished by doorposts and central posts and the finial of the conical tower crudely carved into a human figure—a fact that seems to point to the Maori as the Polynesians who mastered New Caledonia and changed the social system; the introduction of cannibalism and the absence of *kava* point in the same direction. It was doubtless for the greenstone of New Caledonia that the Maori warriors came, and greenstone remained the perquisite of the chiefs; but the greenstone club that had been so useful in the personal combats of Maori warfare degenerated in the new land into a mere decorative and ceremonial symbol of chiefship. The only difficulty is the round tower-like house that was so distinctive of New Caledonia, and had no exemplar in native New Zealand; it might have come from the oval house of Samoa or the round-gabled house of Tonga, or from the conical house of the Moriori, but not from the rectangular house of the Maori. But I observed that in the native villages on the west coast that I visited there were no round or conical houses, and in those that I visited on the east coast, only the chief's house was round, all the rest were rectangular. And the distinctive prefix of most of the tribes and their villages on the east coast is "Ti," which is evidently a mutilation of the "Ati," or "Ngati," so distinctive of Maori tribes.

That there had been previous immigrants of Polynesian men I have no doubt, for there existed in New Caledonia secret societies or clubs like the *tamate* in the Banks Islands; and Dr. Rivers has shown, in his *History of Melanesian Society*,

I think satisfactorily, that these arose from male immigrations that were not strong enough to impose their religious customs and rites on the community in which they settled. The paraphernalia of fearsome masks, the would-be supernatural threats, the exclusion of women, and the policy of violence and plunder that characterise the secret societies of Melanesia belong also to those of New Caledonia.

There is another and more striking indication of earlier immigration from Polynesia. It is the development of stonework all over New Caledonia, but especially on the east coast. There are ramparts of stone that might have been fortifications. There are a few dolmens or trilithons. And there is an extraordinary development of carving on rocks and on blocks of stone. M. Archambault, the head of the post office in Noumea, the chief investigator of this stonework, has collected in the Noumea Museum a large number of representative specimens from all parts of the island. The figures cut are generally geometrical or geometrised; occasionally a human figure or foot or hand, as rarely the figure of an animal, especially a sea animal, a fish, a turtle, an octopus, but once or twice a lizard or a serpent; there are not infrequently monstrous human or compositely-human forms like some of those on rocks and in caves on Easter Island. But the commonest are the representatives of conventionalised trees, which are evidently drawn from the columnar, short-branched araucarias of this and neighbouring islands; and some of these are not unlike the floral or arboreal cross of stone in the Central American ruins. A few suggest weapons, a club, a baton, a dagger, a bent handle like that of the oceanic adze. There are many tatooed spirals, as on some huge blocks at Kawhia, in the North Island of New Zealand; a few spirals in relief; some in waved or notched enclosures; others developed like our S. There are conventionalised characters not unlike the ideographs on the wooden tablets of Easter Island. But perhaps the most suggestive of all are wheel-like figures that seem to represent the sun; constant repetitions of the cup and ring marks of European megalithic work, and occasionally a figure like a curved comb with its teeth upwards, found on megalithic structures in Brittany and in Bohuslan, in the south of Sweden, and interpreted by Montelius to represent a canoe with paddlers standing erect.

How far and how this indicates relationship to American and European megalithism and ancient stone carving is a question that is worth discussing. That it is related to the carved rocks and boulders of Aneiteum, in the south of the New Hebrides, and to the rock carvings in so many of the groups of Polynesia I have no doubt. It is only one of the many indications that Polynesians have been filtering into New Caledonia through long past ages. What distinguishes this infiltration from that into other parts of Melanesia is the deep impress it has left on the social system of the island; as only partially in Malaita, it changed the system of society wholly from mother-right to father-right, and from kin-division to tribal division and chiefship.

J. MACMILLAN BROWN.

Burma.

Grant Brown.

On a Method of Manufacturing Charms in Burma. By R. Grant Brown.

67

A few days ago I was travelling with an educated Burman who told me that there had been trouble among some neighbours of his owing to the daughter of the house, a girl of sixteen, having become pregnant after visits to an *insaya*, or maker of charms. The information obtained from him has since been supplemented by inquiry from others.

When a girl wishes to get a rich husband, or to excite love in some young man whom she fancies, she sometimes has resort to one of these professionals. The charm is obtained in the following way.

The sorcerer takes a broken piece of a monk's begging-bowl, which has been presented to the monk at his ordination and has afterwards been accidentally broken (the sooner the better, but the breakage must be accidental), together with a style offered on the same occasion. With the style he scratches some words or characters, probably meaningless to the uninitiated, and while he does so the piece of pottery must lie on the girl's breast and he must have connection with her. In order to make the charm successful three things must end simultaneously—the writing, his orgasm, and hers. If they are not simultaneous the rite has to be repeated. One suspects that, if the girl is young and pretty, a good many attempts may be necessary before success is attained, for the sorcerer is master of the situation.

Another way is for the sorcerer to take two pieces of silver leaf and, placing himself in position as above, to write on each, laying them in turn on the forehead, each breast, and the navel of the girl. Then he rolls them up separately, and puts one into his mouth and one into hers. He instructs her, as the end approaches, to work the roll out between her lips with her tongue, and he does the same with his roll. Lastly, at the critical moment, he takes her roll into his mouth with his lips and she simultaneously takes his.

When a man desires a charm of this kind he hires a prostitute to go through the rite. She has to be heavily feed, as it is believed that sickness sometimes results, and I am told that payment of two or three pounds is not uncommon.

R. GRANT BROWN.

Archæology.

The Origin of the Dolmen. *By Harold Peake.*

Peake.

68

I.

The views advanced during recent years by Professor Elliot Smith on the distribution of megalithic structures and other cultural items have lately created considerable interest and given rise to no little opposition, but it is in no unsympathetic spirit that I propose to discuss some of the views he has put forward, for I readily acknowledge the value of his inquiries, even if I am not prepared to accept all his conclusions.

One of Professor Elliot Smith's theories may briefly be stated thus. That certain developments of the tomb in Egypt in pre- and proto-dynastic times, led to the evolution of the dolmen in some adjacent regions. Later on, between 800 B.C. and 600 B.C., the Phœnicians, in search of gold, tin, copper, and other precious commodities, carried this form of tomb as far west as Spain and as far north as Brittany, the British Isles, and the Baltic.

He believes that in Egypt, owing to the peculiar views as to a future life associated with the preservation of the body, the inhabitants were desirous of preserving the corpse free from contact with the surrounding soil. As they buried in loose sand, this led them to build round the corpse a retaining-wall of sun-dried brick, thus leading to the idea of a vault, from which he believes the dolmen to have been copied. This course of development was due, he thinks, to conditions peculiar to Egypt.*

But such beliefs as to a future life—if, indeed, the origin of the dolmen be based upon them—may well have been held elsewhere—they are certainly found generally distributed at the present day—and there are many reasons for believing that the germ, at any rate, of this belief was common to the whole Mediterranean

* Elliot Smith, "Evolution of the Rock-cut Tomb and the Dolmen" in *Essays and Studies Presented to William Ridgeway*, 1913.

race. This point, indeed, has been to some extent acknowledged by the professor himself.*

The difficulty of preserving the corpse from contact with loose sand would be felt over the greater part of North Africa—the home, it is believed, of the Mediterranean race—and this difficulty would not be appreciably less where it was necessary to bury in gravel, clay, or loose soil, that is practically everywhere. The conditions, therefore, postulated by Professor Elliot Smith as necessary for the evolution of the dolmen may be met with everywhere, except on barren rocks, where there existed members of the Mediterranean race, or of any other race which connected the idea of a future existence with the preservation of the body.

Now the distinctive feature of the dolmen is the use of slabs of rock, most of them set orthostatically, and neither of these points are met at all generally in pre- or proto-dynastic Egypt. The Egyptians desired to construct a vault or coffer, and quite naturally used the material ready to hand, that is, sun-dried brick. But we can imagine that some people elsewhere, having the same object in view, and not in the habit of using brickwork, may have discovered other means of achieving the same end, and if they happened to live in a region in which slabs of rock, whether of slate, limestone, or marble, dislodged from the face of a cliff by the action of frost, were of common occurrence, it might have occurred to them to use slabs of the material which was ready to hand as retaining-walls to keep the soil from polluting the corpse.

The above is only, of course, a possibility, and must remain a suggestion merely unless we can find some region in which a people are to be found, holding religious views somewhat similar to those of the Egyptians, in which the necessary raw material is also to be found and in which graves have been discovered lined with orthostatic slabs.

Now it appears that in several of the Ægean islands, as for instance Paros, Oliaros, Naxos, Amorgos, Siphnos, and Melos, graves have been found lined with slabs of marble, and dating from a very early epoch.† Marble is found in Paros and perhaps in some of the other islands, while the primitive population is believed to have been of the Mediterranean race. Here, then, we appear to have all the conditions requisite for the early development of the dolmen, though it would be hazardous, as yet, to assert that this form of tomb took its origin in any one of the particular islands named.

Professor Elliot Smith also makes much of the ante-chambers of the Egyptian mastabas, and points out the resemblances between them and some of the dolmens, as both seem to have been used for serving the dead with food and drink. But if we grant that the belief in an after-life of the corpse was a common inheritance of the Mediterranean race, and the presence of food vessels and the like in their graves compels us to believe this, the similarities of the mastabas and the dolmens are explained without assuming any further connection than similarity of religious beliefs.

II.

Professor Elliot Smith has stated that M. Siret has arrived quite independently at the same conclusions as he has, namely, that the Phœnicians carried megalithic culture to Spain and Brittany. It may be well, therefore, to examine M. Siret's conclusions in detail.‡ M. Siret begins by discussing the site of the Cassiterides, and cites very strong evidence to show that the tin islands of the ancients were the

* *Ibid.* p. 498.

† Dussaud, R., *Les Civilisations Préhelléniques dans le Bassin de la Mer Egée*. 2nd Edition. 1914, p. 83.

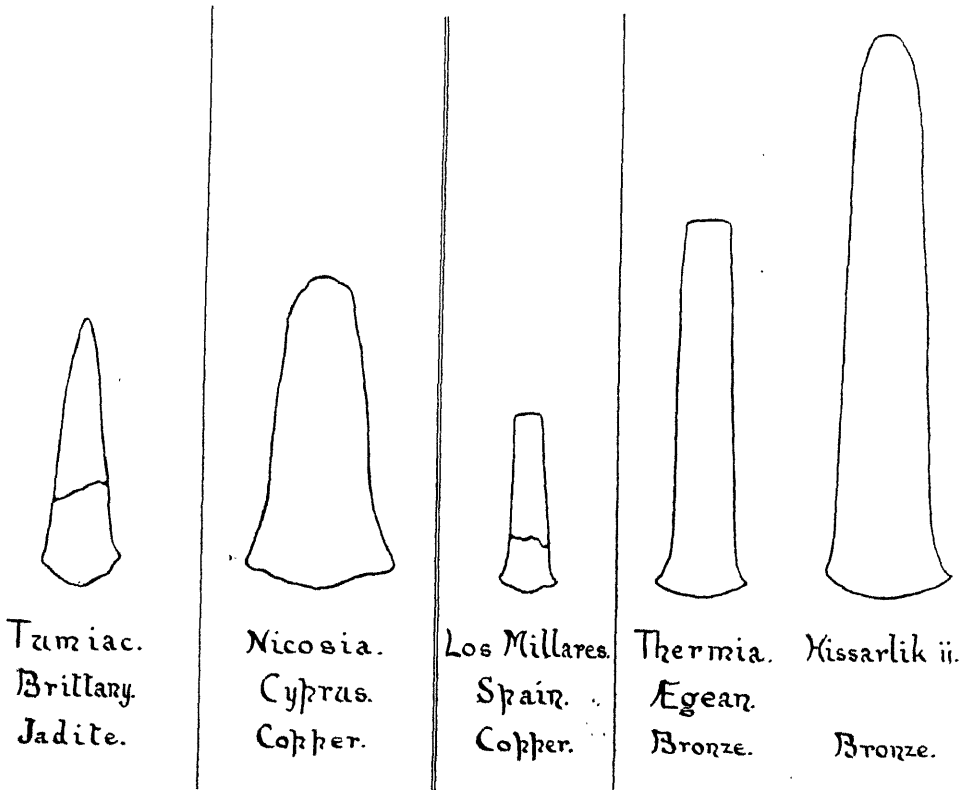
‡ Siret, L., "Les Cassiterides et l'Empire des Phéniciens," in *L'Anthropologie*, xix, 162.

isles off the coast of the Morbihan. He then proceeds to describe four periods during which the tin trade was in existence.

During the first period, which M. Siret fixes "provisionally and approximately" at the first quarter of the second millennium," he believes that the Sidonians "discovered the western sites of tin and other metals and started a prolonged and "lucrative trade." "Towards the twelfth century," he continues, "the invasion of "the Celtic peoples, friendly to the Greeks, hostile to the Phœnicians, allowed the "former, to the detriment of the latter, to develop their trade in the north-west basin of the Mediterranean." "At the time of this invasion of the Celts, the "Sidonians were compelled to evacuate Spain; the Tyrians succeeded them and by "the foundation of Gadir succeeded in retaining the monopoly of the ocean and of "the seaborne trade in tin." The third period included the Carthaginian and the fourth the Roman trade in this region.

Now this view agrees with that of Professor Elliot Smith in claiming the Phœnicians as the earliest traders with the west, but differs in placing the beginning of this trade about 2000 B.C. instead of 800 B.C. But when we look for evidence, we find nothing but tradition in support of the second period, and imagination only as the basis of the first. M. Siret writes much on his ideas of the early religion of these regions, which consisted, he states, of a male deity in the form of a cuttle-fish and a female deity in the form of an adze, but no one, I fancy, who has read his arguments would be prepared to take them seriously.

But if we must dismiss as foolish imaginings M. Siret's restoration of the primitive Mediterranean religion, and must regard his theory of ancient Sidonian trade as based on no sound reasoning, we cannot deny that he has cited evidence



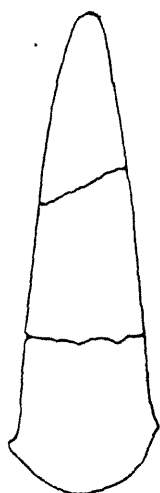
[After Siret.]

[After Siret.]

These are not all drawn to the same scale.

which will enable us to form some idea as to the origins of the trade, the existence of which he has demonstrated beyond doubt.

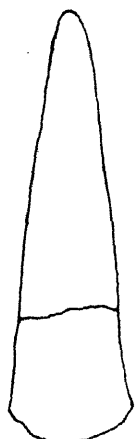
He figures four axes, three of stone from Brittany and one of copper from Spain, which can be matched with tolerable accuracy by specimens from Hissarlik II,



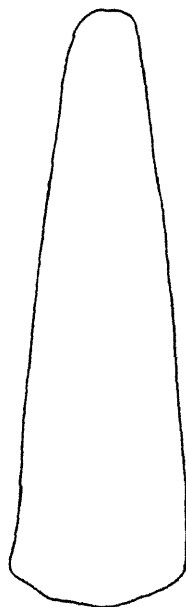
Mané-er-Hroëg. Mont Saint Michel.

Brittany.

Jadite.

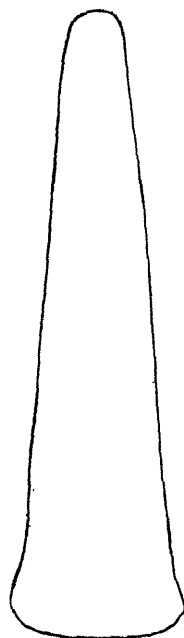


Chloromelanite.



Cyprus.

Copper.



Cyprus.

Copper.

[After Siret.]

These are not all drawn to the same scale.

Cyprus, and the Ægean. He figures also, from Neolithic graves, jars resembling Cycladic pyxides and owl-like figures resembling some from Cyprus and Hissarlik II. All this tends to show that, at a time when metal was almost unknown in Brittany and Spain, its mineral wealth was exploited by traders from the eastern Mediterranean, and that this took place during the existence of Hissarlik II.

In support of this one must cite the strange ivory object found at Castelluccio, near Syracuse, amid copper or early bronze surroundings,* which exactly resembles one found by Schliemann in Hissarlik II,† and the statement by Déchelette that vases found by Siret in Spain resemble in shape Cretan vases of the early Minoan period, while there were also found there many stone cists consisting of six slabs, exactly resembling those found in the islands of the Ægean.‡

* Peet, E., *Stone and Bronze Ages in Italy*, 204; Orsi, P., "La necropoli sicula di Castelluccio," in *Bul. Pal.* (1892), 7. Plate iv, 2.

† Schliemann, *Ilios*, 533, Fig. 565; both are figured in Déchelette, J., *Manuel d'archéologie*, ii, 75.

‡ Déchelette, J., "Essai sur la chronologie préhistorique de la Péninsule Iberique" in *Revue Archéologique* (1908, July-December), 251, 256.

This evidence seems to suggest that this trade between Spain and the eastern Mediterranean took place during the early Minoan period, which closed, according to most authorities, about 2200 B.C., and during the existence of Hissarlik II, which, as I have recently endeavoured to show, was sacked about the same date or a few years earlier.

It may, perhaps, be worth while to narrow down somewhat the area from which these traders set forth, though it is perhaps premature to put forward a suggestion as to their home. They were evidently in trade relations with Hissarlik, the Cyclades, Crete, and Cyprus. No evidence has yet been adduced that Hissarlik had a port, though it seems to have been in touch, by an overland route, with Cyprus, which will probably account for the Cyprus-Spain resemblances. Had Cyprus been in direct touch with Spain, it would probably have learnt the use of tin earlier than it did, and so brought its copper age to an earlier close. Crete does not appear to have been in direct touch with Hissarlik during the early Minoan period, and the same seems to be true, as far as our present information extends, of the Cyclades.

Of course, in dismissing these centres as the homes of our early traders with the Spanish mines we are relying on negative evidence, always a weak rock on which to found a theory, still the distribution of the places having early Spanish connections seem to indicate that the centre of this trade was some island in the north-east of the Ægean, and none of the islands in this region have yet been explored by the pre-historian. Later analogy suggests that even in these early days sea-power shifted from centre to centre, and that there were many thalassocracies before the days of Minos. The evidence from Phylacopi suggests that an early centre was at Melos, though as its main export was obsidian, its supremacy departed when the use of metal became general. It seems possible, therefore, if not probable, that in the first beginnings of the Metal Age the trade and industry was centred in some island not yet explored.

III.

I have endeavoured to show that it is to the north-east of the Ægean that we must look for the centre from which mining prospectors set out for Spain and Brittany, carrying with them the elements of megalithic architecture. As these regions have not been adequately explored from an archaeological standpoint, and are now too near to one of the centres of hostilities to be examined at the present moment, I might well leave the inquiry at this point. But I cannot forget that when history has been lacking, and archaeology, for the moment, at fault, tradition has more than once, as at Troy and Onossos, pointed the way to further investigation with surprising accuracy.

Now Greek tradition is full of references to mysterious divine or heroic beings, closely associated with the working of metals, of whom the Dactyls and Cabiri are the most prominent. Whether the former were always associated with Crete, or trace their origin, as has been suggested, to Caria, does not matter for the moment, as they were in any case associated with the south-eastern corner of the Ægean, while it is to the north-east that our attention is at present directed.

But those mythical early metal-workers, the Cabiri, were worshipped especially in Samothrace, Imbros, and Lemnos, though their cult spread later to other regions, and these three islands are in the right area and lie at no great distance from Hissarlik. The Cabiri were reputed to be the sons of Hephæstos, and the story that the god of metals, when ejected from Olympus, fell into Lemnos, "where Sintian folk tended him," is as old as the *Iliad*.

Time will show whether I am right in my suggestion that Lemnos was the home of the early metal-traders who visited Sicily, Spain, and Brittany, but it may be worth while to remind my readers that at a later date Lemnos was inhabited by

Tyrrhenians, probably akin to those other ancient metal-workers, the Etruscans, and that an inscription in the Etruscan tongue, or one closely resembling it, has been found in the island. Also that Tyrrhenian Pelasgians are credited with having built the Pelasgian wall on the Acropolis at Athens, and possibly elsewhere in Greece, that similar masonry is found on the older sites in Etruria, and also in Sardinia in association with megalithic structures.

The suggestions that I wish to make—for they are suggestions only—are that prior to 2200 B.C. some traders from the north-east of the Ægean, familiar with the use of copper, and probably possessing the secret of bronze, set out from their home, which may have been Lemnos, in search of copper and tin. Their voyages of discovery led them to Sicily, Spain, and in all probability to Sardinia and the Balearic Islands. They were also in touch with the Morbihan, though possibly through the mediation of western traders, who may have been engaged, for some time past, in commerce along the Atlantic sea-board. At home they had relations with Crete, the Cyclades, and Hissarlik, and through the last-named possibly with Cyprus. They were accustomed to erect Cyclopean walls, and learnt the use of cists from the people of the Cyclades; they spread the knowledge of these two arts among the people with whom they traded, and the result was the evolution of the Dolmen.

HAROLD PEAKE.

Admiralty Islands.

Hardy.

Note on Native Dance in the Admiralty Islands. By Commander
H. N. M. Hardy.

69

While visiting Piteln, an island on the north side of the Admiralties, in January 1915, the dance which is the subject of these notes was given before the Administrator, Colonel Pethebridge, and his staff, of which I was at the time a member.

The males, to the number of 150, gathered on a beach at some little distance from the scene of the dance, and there could be seen searching for specimens of the large white cowry (*Ovulum ovum*), each man jamming his shell on to his penis in such a way that the glans was gripped tightly in the opening of the shell. They then came to the dance ground, in single file, performing a step resembling the common gymnastic performance of "knees up," and collected in lines of about fifteen facing us.

The "star" performers, of whom there were eight, took their places on a prepared stage, which had been set up the day before, and which consisted of a carved beam, some 25 feet long, the upper surface being some 3 inches wide. The ends were curved upwards, and carved very similarly to the bows of a canoe, while less elaborate carving in the form of crocodiles extended the length of the beam. The whole was supported on trestles some 6 feet from the ground.

In addition to the shells, their costume consisted only of bead necklaces and bracelets and the usual head ornaments, with a few coin and shell armlets on the upper arm. No weapons were carried.

Those who danced on the beam were all men in the prime of life, but among the rest were men of all ages, from five up to sixty or seventy. The children who were too young to wear the cowry shell, of which there is only one size, knocked holes in a smaller shell, a kind of cone-shell, and threaded their members through these holes. On a signal from the Lului—the local chief—the dance began, the steps being apparently designed to make the shells oscillate as much as possible, accompanied by loud shoutings and wild leapings into the air. Each rank came in turn to the front through the gaps in the rank before it, the front rank moving back, but the "beam" men remained on their rather uncomfortable stage the whole time—about half an hour.

When the dance ended, the principal dancers were examined, with the shells still in position, and the shells were found to be most firmly fixed, although the proceeding must have been more than painful.

Women were not allowed to watch the dance, though in practice there were fifty or sixty women hiding in the scrub and viewing the whole proceeding.

I was told that the dance was universal in the Admiralties, but was unable to get any explanation as to its real meaning. It certainly seems to be of frequent occurrence in these islands, as in our short time in the Admiralties we heard of three other dances being given in other villages.

To make the above account clear it should be added that most, but not all the men, were circumcised, but that this was not so in the case of the boys. The shells themselves are of considerable interest. While in some instances it seemed that cowries collected on the beach were used without any preparation, two of the specimens which passed into my hands had been carefully prepared by chipping away the inner whorl of the shell and the columella, and then grinding smooth the rough edge which now constituted the lip of the shell, thus increasing the size of the orifice into which the glans is thrust, and also rendering the shell considerably lighter.

H. N. M. HARDY.

Mathematics.

Thomas.

A Duodecimal System in South Africa (?) By N. W. Thomas.

70

In the Bauchi highlands there seem to be several duodecimal systems in vogue. I heard of two such quite recently, though I was able to secure a specimen of only one, given to me by the Rev. E. Evans, from the Burum tribe. It is as follows :—

1	<i>gwinin</i> .	7	<i>bitama</i> .
2	<i>bipa</i> .	8	<i>bitimui</i> .
3	<i>bitad</i> .	9	<i>šantad</i> .
4	<i>binas</i> .	10	<i>šamba or šabipa</i> .
5	<i>tuñum</i> .	11	<i>šagwinin</i> .
6	—	12	<i>koro</i> .

Migeod quotes this language from an unpublished MS. of Francis; but from five onwards the only number agreeing with my list is seven; ten is given as *likuru*, whereas *koro* is twelve according to my informant. Migeod's *naveviba* (twelve) is unconnected with his *likuru na agwinin* (eleven), which suggests a mistake; his number for eight (*lurvit*) and nine (*shavitarr*) are sufficiently like those of my list to suggest errors in copying.

By some accident my informant could not give the number for six; but his list is, on the face of it, quite a possible one, and explains Migeod's otherwise anomalous *shavitarr*.

N. W. THOMAS.

REVIEWS.

Physical Anthropology.

Duckworth.

Morphology and Anthropology: a Handbook for Students. By W. L. H. Duckworth, M.A., M.D., D.Sc. 2nd Edition, Vol. I. Pp. 304, Fig. 208. Cambridge University Press. 1915. Price 10s. 6d. net.

The appearance of a new edition of Dr. W. H. L. Duckworth's manual on *Morphology and Anthropology* is a matter of the highest interest for British anthropologists. Dr. Duckworth occupies an unique position; he is the only anatomist in the Empire set aside by his University to give a systematic course of instruction on all that relates to the origin and nature of the human body. The first edition gave us the scope of his lectures in 1904; when we compare the present

edition with the first we see how rapidly his subject has grown in these past eleven years. How much of that progress is due to Dr. Duckworth's own unremitting toil may escape the eye of the casual reader, for the author is not one who blazons his own discoveries. His teaching is free from dogmatism and finality; there is in every page the manifest desire to deal justly with the investigations of his contemporaries and a reluctance to emphasize his own conclusions.

We have no other book in the English language which deals with that well demarcated field of knowledge covered by Dr. Duckworth's manual. He feels that the terms "anthropology and morphology" indicate in an imperfect manner the field of knowledge covered by his manual. Our conception of the position of man in the animal kingdom and of the manner in which he came to occupy that position must ever rest on facts culled from diverse sources. Dr. Duckworth has gathered his facts from the human anatomist, from the comparative anatomist, from the "primatologist," the embryologist, the palæontologist, the biometrician, and from the ethnologist. Plainly we stand in urgent need of a happier title than *Morphology and Anthropology* to cover the system of knowledge on which we base our conception of the origin and nature of the human body.

Dr. Duckworth realises that the foundation of all our speculations must be based on an accurate and systematic knowledge of the anatomy of the Primates, particularly of those members of the order which stand close to man in point of structure and of origin. Hence in the present edition he has rewritten and greatly expanded the section which deals with the anatomy of the apes, and with their position in the mammalian phylum, and issued it as a separate volume—Vol. I—of the second edition. He gives a prominent position to Tarsius; excellent figures of the cortical areas of the brain have been introduced; his own studies and sections of the larynx have found a place; the papillary system of the hands and feet are fully described. Altogether Vol. I serves as an excellent introduction to the anatomy of the Higher Primates.

The historical introduction has been expanded; it is excellent in every way, but we hope when the author applies the term "egregious" to the late Dr. James Hunt he uses the term in its literal and not in its more modern sense. The more one looks into the life and deeds of the founder of the Anthropological Society the more one is impressed with our indebtedness to him. We hope in the next edition the poor gorilla depicted in Figs. 29, 30, and 31 of the present edition may be supplied with a suitable covering of hair. The beast and the book deserve everything of the best.

A. KEITH.

Persia: History.

Sykes.

A History of Persia. By Lieut.-Colonel P. M. Sykes, C.M.G., C.I.E., with Maps and Illustrations. London: Macmillan & Co. 1915. 2 Vols. **72**
Pf. xxv + 544, 565: 21 × 14 cm.

The preparation of a new history of Persia, in supersession of Sir J. Malcolm's classical work, which, excellent as it was considering the time when it was written, is now superseded by the results of more recent research, could not have fallen into better hands than those of Lieut-Colonel Sykes. His long residence in, and wide explorations of, the country qualify him for this difficult undertaking, and his knowledge of the local climatic and geographical conditions enables him to throw new light on the physical causes which have exercised a dominating influence upon Persian history. He has not attempted to survey the field with a first-hand study of the original sources, but he has used with good sense and considerable literary power the best modern authorities, while his acquaintance with the psychology of the race enables him to throw fresh light on many disputed problems. The only

criticism on such a work which may be ventured is that he uses too wide a canvas. The space occupied is some seven thousand years, and the author's study covers not only Persia itself but the borderlands, the history of which is everywhere found to control the destinies of the people whose history forms his special subject. After discussing the geography and ethnology of Persia itself he passes on to Elam and Babylonia, the Assyrian empire, the religion of the Medes and Persians, the rise of the Median power and the fall of Assyria, Macedonia, and the conquests of Alexander, the history of Parthia, the Roman wars, the attacks of the Huns, the Arab conquests and the beginnings of Islam. Thus the survey extends from the Mediterranean to the Punjab, and his method involves the consideration of much which is arid and uninteresting. The mass of detail tends to weary any but the most determined reader until we arrive at last at modern times, and find a new democracy aiming at a Constitution on western lines, for which Persia in its present condition is obviously unsuited.

Thus the work lacks to some degree vivacity and interest, because the mass of material tends to overwhelm the writer. But in spite of these disadvantages, inevitable on account of the scheme of the book, it is highly valuable as a careful and well-documented survey of a phase of history which has never been written with an equal degree of completeness. For the student it must long remain the classical account of Persian history. The book is supplied throughout with admirable photographs of scenery, architecture, objects of art and industry, coins and portraits of representatives of the more interesting races, while the numerous maps adequately illustrate the history at its successive periods. Lieut.-Colonel Sykes may be heartily congratulated on the completion of a work which has involved great labour and research. It will be of the highest value to all students of Oriental history.

W. CROOKE.

Anthropology.

Keith.

The Antiquity of Man. By A. Keith, M.D., LL.D., F.R.S., Hunterian Professor R.C.S. 513 pp., 189 illus. 1915. Williams and Norgate. 10s. 6d. net. **73**

In *The Antiquity of Man* Professor Keith addresses himself to what is surely one of the most enthralling problems which can ever engage our attention. Were this doubted, we venture to think readers of the book will doubt it no longer.

Of the many different *motifs* of the book, perhaps the chief is the forcible and persistent plea which the author makes for the consideration of evidence on its merits, with a mind untrammelled by tradition and unclouded by preconceived ideas. It is a plea well worth making, for a narrow dogmatism is not in these later days by any means the peculiar prerogative of the theologian.

On the other hand, if a theory is oftentimes a bad master, it is frequently a good servant, and no one who has worked at such problems as are discussed in this book, and certainly not the author, is likely to under-estimate the value of theory in any attempt to unravel the torn and twisted skein of the Past.

The four great arguments of the book are the feasibility of reconstructing a skull from its fragments, the specific distinction which exists between *Homo primigenius* and *Homo sapiens*, the priority in time in Western Europe of *Homo sapiens*, and the possibility of the combination in a single individual of such anthropoid and human features as are to be found in the Piltdown skull.

As to the first of these, the test to which Professor Keith so courageously and characteristically submitted himself, and from which he emerged so creditably, leaves the critic almost silent; but there are a few things which should be always borne clearly in mind: firstly, one should be extremely cautious in applying data obtained from the examination of human skulls to the reconstruction of skulls belonging to

animals which are presumed to be not human, *e.g.*, Eoanthropus ; secondly, no reconstruction can ever have the value of a perfect skull, and it is unwise to base any elaborate theories upon it ; and, lastly, there must be, of course, some limit to the parts necessary for reconstruction to be possible. For example, we confess we are not impressed by the outline drawings accompanying the Bury St. Edmunds and Trenton fragments.

As to the specific distinction between *Homo primigenius* and *Homo sapiens*, we are not disposed to admit the claim with anything like the same confidence which possesses Professor Keith. It is true that the term "species" does not permit of clear definition, and that being so, what the author regards as a specific feature, the present writer, and possibly others, might perhaps reasonably be allowed to consider of less value. That *Homo primigenius*, to give him his modern title, was a distinct type, a type which, moreover, in its purest form, is now extinct, we will readily admit, but we desire other reasons than those given before singling him out for exclusion from the community of modern Man. The character of the extremely variable supra-orbital ridges, the form of the temporal articular surface so far as it can be judged from the very few specimens available, the size of the dental pulp cavities, seem to us quite insufficient for so drastic and unparalleled a measure. In cranial measurements, in cranial capacity, and, so far as we can judge, in the proportions and modelling of the face, he falls well within the range of modern man. In size of brain and in the use to which that organ was put, there is admittedly no justification for any separation. Were there any such specific distinction as Professor Keith believes, we think it would almost certainly have been reflected in the implements, but the paleoliths found with or associated with *Homo primigenius* seem to be of every whit as high workmanship as those found with *Homo sapiens*. Perhaps, however, we are to extend Klaatsch's theory—propounded to explain the presence in the same cave of the two species—that *Homo primigenius* kept *Homo sapiens* in a state of subjection, in which case it would be only natural that the latter should be the munition worker of the period.

Whatever credit is due to Professor King, of Galway, we imagine the separation of Man into two species will be chiefly identified with the name of Schwalbe. The latter, however, never seems to us to have fully appreciated the great variation which exists, on his own showing, between the various members of the so-called species between, for example, Spy I and Spy II. Moreover, the example of modern Man which he chose for his comparisons was not by any means the lowest form available.

This question is not one which should be left, or need be left, in its present unsatisfactory position. We have simply to place side by side the *highest* examples of *Homo primigenius* and the *lowest* and *highest* examples of modern Man, and we venture to think the unprejudiced anatomists will show at least considerable hesitation before he selects the two which are most akin. If, on the other hand, we take the lowest form of *Homo primigenius* which can be *imagined*, and place it side by side with the highest form of *Homo sapiens*, as the author does in Fig. 53, it is not difficult to create an impression in the not anatomically-minded of a specific or even a generic difference. All we will ask is, if Neanderthal Man was as he is portrayed in this figure, who made his implements—those masterpieces of flintcraft for which the Mousterian period is so justly famous? Denying, as we think we may, the existence of any specific distinction between the two, we remove from Professor Keith's path, in spite of himself, one great stumbling-block to the acceptance of his main thesis, the thesis with which he is peculiarly and closely identified—the priority of *Homo sapiens* ; for all we have to imagine is that *Homo primigenius* is an aberrant type of *Homo sapiens* whom possibly the movements of the ice in the Pleistocene period brought into Central and Western Europe.

It is in arguing for the priority of *Homo sapiens* that Professor Keith is at his best, and we think that in the present state of our knowledge we have no option but to accept his view, particularly as it has received recently such striking support from the discovery at Piltdown.

The latter event naturally has special prominence given to it. Dr. Smith Woodward's first model is examined in detail, and the reasons why it cannot be accepted by anatomists are clearly and firmly stated. It is unfortunate that Professor Symington's criticism of Professor Elliot Smith's interpretation of the endocranial cast was not published in time to be incorporated in the volume, for only in a less degree than Professor Keith's criticism does it succeed in finally disposing of the ill-fated first essay at reconstruction and of many of the opinions based thereon.

In the account of the discovery, we note that Professor Keith rightly admits that we cannot exclude the possibility of the cranium and mandible having belonged to separate individuals, as did, for instance, the fragmentary teeth of the Mastodon and Stegodon.

It has been pointed out that it would be strange if they were parts of two different and previously unknown animals, but now that we learn from Professor Keith's reconstruction of Eoanthropus that the cranium falls within the range of human variation, we have only to suppose that, with parts of Man was found part of an unknown anthropoid ape—after all, surely not a very high flight of imagination. Certain parts of a tooth of Stegodon were found for the first time in Western Europe in the same deposit. Mandibles have a habit of appearing apart from the rest of the animals to which they belonged, for instance, those found at Naulette, Malarnaud, and Heidelberg, and, further, it was quite time that representatives of our modern anthropoid apes were appearing.

Professor Keith, deserting, as it seems to us, the stable ground of biological experience for that treacherous country in which reign the co-efficients of chance, argues well and ingeniously for the mandible belonging to the cranium, for a temporo-maxillary joint of the human pattern, and for a dentition of which the cheek teeth are human and the front teeth anthropoid. He is not, however, to our mind, convincing, and we think that while further discussion is useful in stimulating examination and inquiry, we must wait for additional material evidence before we can arrive at a universal agreement, on this, as on so many other dark problems.

The remains of Pleistocene Man are so numerous that the author no doubt found it impossible to refer separately to each, and, rightly or wrongly, he has chosen his examples in a very large measure from those most recently found. The consequence is that the book, while it has the great advantage of including those specimens which have come under the eye of the author, has not that nicety of balance which some of us would have liked to have seen. Little, if any, mention is made of certain important discoveries, while many of which the authenticity is a matter of doubt are treated at considerable length.

We might, in passing, remark that at a time when we know much of the cranium of Pleistocene Man and but relatively little of his face, it is curious that so little attention should be paid to the two almost complete facial portions found in the stalagmite on the floor of a cave at Cattedown, and described by Dr. Beddoe in the *Transactions of the Plymouth Institution*.

Enough has surely been said to testify to the extraordinary interest of the questions discussed—an interest which gains not a little from the vivid literary style of the author. Professor Keith can reconstruct more than skulls, and on many pages he brings scenes and incidents before us with telling effect.

He has evidently exerted himself to the utmost to get at the truth of the various problems considered, and whether or not he has succeeded in every case the

future alone can decide. In the meantime we, as British Anthropologists, stand indebted to him for much—a debt which it is our pleasure to avow—in that he corrected the misshapen, reconstructed model of the Piltdown skull almost before it had left our shores, and in that he has carried through in the teeth of strong opposition, and to what at the moment appears to be a successful issue, his fight for the priority of the *Homo sapiens* type.

There are other fights ahead, and since he accepts the Galley Hill skeleton, of pure Neolithic type, as of Pleistocene date, we hope that some day he will look into the tradition that the long, oval-headed Neolithic people of Southern England came to our country from the Mediterranean basin. There appears to be an insurmountable difficulty for some Anthropologists to imagine that a type can have appeared where it is found—it must always for them be introduced from elsewhere, preferably from the East.

The book is one which not only adds to the high reputation of the author, but reflects no little honour on the Institute over whose affairs he has presided for so long with such distinction.

WILLIAM WRIGHT.

Bibliography.

Hill.

Royal Colonial Institute Bibliographies. No. 1. A Select Bibliography of Publications on Foreign Colonisation—German, French, Italian, Dutch, Portuguese, Spanish, and Belgian—contained in the Library of the Royal Colonial Institute. Compiled by Winifred C. Hill, with an Introduction by the Librarian, Royal Colonial Institute. 1915. 74

All anthropologists will wish for the success of the bibliographies of which this is the first to be issued. That colonies are built amidst the ruins of the most precious data of the ethnologist will not deprive members of our own Institute of their sympathy with the aims of the Royal Colonial Institute. We have much in common, and many of the publications listed in this bibliography are ethnographical in character.

The introduction (by Mr. Evans Lewin, Librarian) is to the point, and calls attention to the fact—emphasized by a look through the lists of books and papers—that our national neglect of the study of native races is paralleled by our disregard of the comparative study of colonisation. As colonists we have led, without caring how others have followed. In some other fields we have followed, without caring how others have led.

Criticism of one word in a bibliography is not excessive—there is no such body as the Royal Anthropological Society. We also are an Institute.

H. S. H.

Social Organisation.

Rivers.

Kinship and Social Organisation. By W. H. R. Rivers, M.D., F.R.S. London: Constable & Co. 1914. Price 2s. 6d. net. 75

Three lectures delivered by Dr. Rivers at the London School of Economics in May 1913 have been published under the above title as one of the series of *Studies in Economic and Political Science* of the School. They were an instalment of the results of the Percy Sladen Expedition to Melanesia, of which Dr. Rivers has given a further account in his recently published book on Melanesia. The aim of the lectures, briefly stated, was to show that the terminology of the classificatory system of relationship finds its counterpart and explanation in the social system of the people who employ it. His evidence is drawn chiefly from Melanesia, but by instances from other sources he shows that this statement of parallelism is of general, possibly of universal, application. Incidentally he raises a number of interesting questions, among them how far Morgan's work may be considered of permanent value, and

what is the result of the attack made upon him by McClennan and his followers Dr. Rivers' analysis of an extremely complicated subject might well serve as a model of lucid and logical exposition. Of his patience in investigation and acute perception of the essential in a tangled mass of evidence it is difficult to speak too highly.

E. N. F.

Mythology: India.

Rama Varma Raja.

Comparative Studies. By K. Rama Varma Raja, B.A. Madras: 1908.

76

This little book contains four studies by Mr. Varma Raja, in which he argues in favour of an early inter-communication of mythological ideas between Babylonia and India. In the first of these (the Dragon Myths) he contends that there is not only a similarity in the narrative but also a remarkable resemblance in the names. The India Rāhū and Tamas are equated with the Babylonian Rahab and Tiamat.

In the second essay a similar parallel is found between the Indian Śakti and the Egyptian Sekhet. The author seems to regard Śakti as a goddess in herself, specially identified with Kālī, the terrible form of Śiva's consort. But every Indian deity has a Śakti; Kālī cannot be specially selected as entitled to the appellation. Moreover, the whole doctrine of Śaktis is of late Tantric origin, and cannot be traced to the Vedic period, when relations with Egypt are conceivably possible.

In the third essay the author compares the Indian caste system with other early systems, especially those of Egypt and Persia. In the fourth he indulges in various philological excursions, in which it is impossible to follow him. Most of his derivations are based on insufficient evidence, and no valuable inferences can be safely based on them.

The little book may be welcomed as an honest attempt to grapple with some very thorny problems.

M. LONGWORTH DAMES.

Literature.

Ross.

Three Turki Manuscripts from Kāshghar. By E. Denison Ross, Ph.D., C.I.E. (Archæological Survey of India).

77

Professor Denison Ross has here given an extract (lithographed at Lahore), in the original Turki, of a work in the Central Asian form of the language, containing a number of works bearing on the history of Turkestan. In his preface he gives an abstract of the contents of the three volumes of the original. This publication should be of great use to students of Modern Turki, as distinguished from the Ottoman Turkish language.

M. LONGWORTH DAMES.

Africa, South: Linguistics.

Stirke: Thomas.

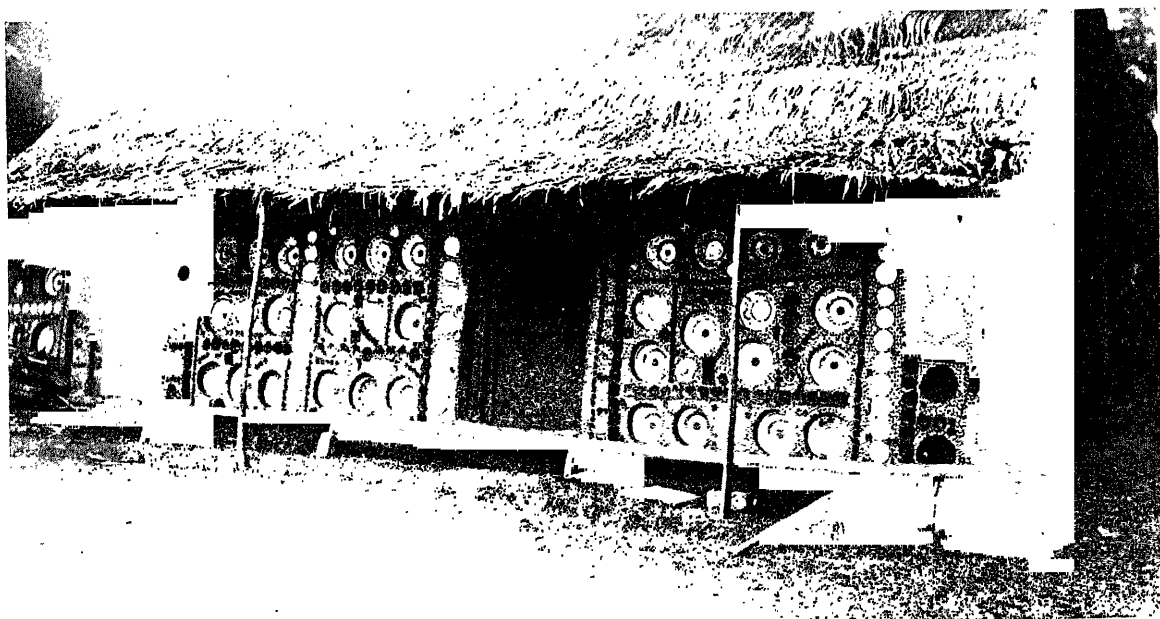
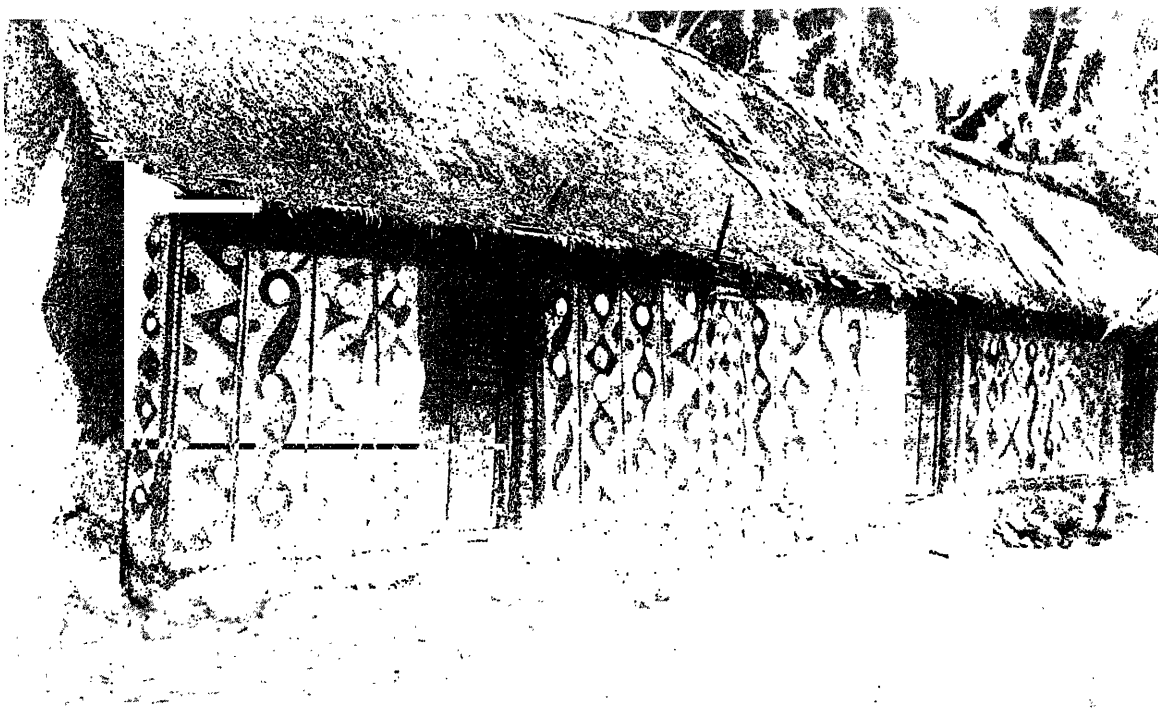
A Sikololo Phrase Book. By D. E. C. Stirke and A. W. Thomas.

78

London: John Bale, Sons, and Danielsson, Ltd. 1915.

A book of everyday conversations in the Kololo dialect of Chwana, which is the *lingua franca* of Barotseland. It is intended for use with Dr. S. Colyer's *Sikololo Grammar and Vocabulary*, and the phrases are classified under the headings: "Boating," "House and Kitchen," "Medical," "Trading," "Travelling," "Hunting and Fishing," and "General Conversation." The book will be useful to the settler or traveller, and the compilers hope that it will do something towards raising the standard of this somewhat corrupt dialect above the level of the "kitchen Kaffir" used further south. It is conveniently interleaved and clearly printed.

S. H. R.



DECORATION OF IBO HOUSES.

ORIGINAL ARTICLES.

With Plate I-J.

Nigeria, Southern Provinces.

Talbot.

Note on Ibo Houses. *By P. Amaury Talbot.*

79

Among Ibos the decorative sense seems both more general and more highly developed than with any other West or Central African people as yet known to us. True, Ibo buildings are far from approaching either in skill or beauty the cone-shaped houses of Musgum, on the Logone River, in French Central Africa, the domes of which are marvels of architectural skill; nor the elaborate mural decorations of some of the high-walled buildings of Gabai Fika or Kano, in the Northern Provinces of Nigeria. The walls of the low rectangular Ibo houses are usually ornamented either by means of patterns cut out from the soft clay by a multitude of gay-coloured plates diversified by the square bottoms or rounded tops of dark green bottle glass fixed into the surface, as is most general among the Isokpo; by elaborate designs made with cowries; or a fine mosaic formed from fragments of white pottery, as is most usual among Okkpaw towns. This last forms a particularly beautiful colour scheme on old houses, when the yellow walls are partly coated with a film of sun-kissed moss, vivid green in tone, from which the white pattern stands out with striking clearness and effect.

The mural decoration, as well as the mudding of the walls, is the work of women: while the men raise the framework, make the roof, and provide the doors. These latter are cut from out a section of tree trunk and are often elaborately carved. The Sobo of Osua-Konike, on the Niger, also affect carved doors, but these are usually made, not in one piece as among Ibo, but in three longitudinal planks, joined by bronze or iron clamps. About the middle of the central panel a handle protrudes, not fastened on as with Ibos, but cut from the solid.

P. AMAURY TALBOT.

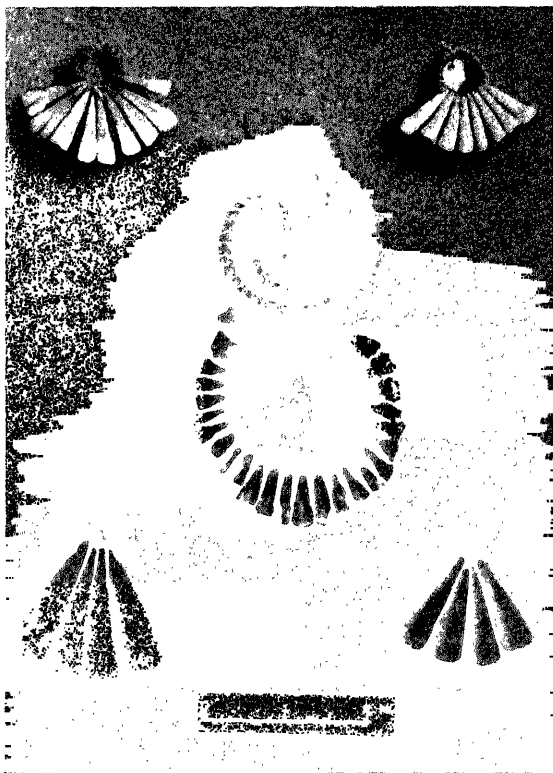
Ethnography. Skinner.

Maori Necklace and Pendants of Human and Imitation Teeth. *By H. D. Skinner.*

80

The necklace and pendants figured form an unique collection in the Maori section of the Ethnographical Department of the British Museum. In no New Zealand collection, and in none of the English museums visited by the writer, are there any other examples in which the string or lace of phormium fibre has been preserved.

The large central specimen is a necklace, while the four outer ones were probably intended to be ear-pendants. The two upper



MAORI NECKLACE OF HUMAN TEETH.—PENDANTS OF HUMAN TEETH.—PENDANTS OF ARTIFICIAL HUMAN TEETH.

ear-pendants are composed of nine and eight single-fang teeth, each tooth having a hole bored through the fang. The two lower pendants are each composed of four imitation incisor teeth cut from the central whorl of some large shell. The necklace is composed of twenty-three single-fanged teeth and two double-fanged. No locality is stated for any of the specimens.

In the collection of Dr. J. Simcox is a necklace of upwards of ninety single-fanged human teeth, without the string, found with a skeleton at Purakanni Beach, near Dunedin. A similar necklace was found on the adjoining Kai-kai beach, and odd single specimens occur in several collections from that neighbourhood. They are found also about Tasman Bay and other parts of New Zealand.

Imitation incisors in shell are not uncommon in the Otago district. There is a necklace of them in the White collection, figured in Hamilton's "Maori Art." The writer found four together at Purakanui and the same number together at Murdering Beach. They are also represented in the Lukin's collection from Tasman Bay. The writer found one at the Wellington Heads and another at the mouth of the Waingongoro stream, in South Taranaki.

It would be interesting to map out the geographical distribution of necklaces of human teeth in the Pacific. I believe that where they occur in Polynesia they are an indication of Melanesian influence. It is significant that none have been recorded among the Mori-ori, who may be looked on as very pure, perhaps the purest, Polynesians. I believe that no examples are recorded from Easter Island.

Shell teeth are confined to New Zealand, where they appear to be pretty generally distributed. In the south occur imitation shell adzes about the same size as the teeth, which doubtless suggested the idea of the imitation adze. H. D. SKINNER.

Kordofan: Ethnography.

Seligman.

A Simple Form of Reaping Knife from Northern Kordofan, By **81**
Professor Seligman, M.D.

Among the simple agricultural tools used by the sedentary Arabs of Northern Kordofan is the knife—it can hardly be called a sickle—with which they reap the dura. Two specimens of this implement are shown in Fig. 1. Each consists of an iron blade, more or less razor-shaped, and having at right angles at each end a small tang (Fig. 2), which is thrust into a wooden handle. The blades are said to be made by the Arabised descendants of the pre-Arab iron-working Nuba, who still dwell on the hills which dot the plains of Northern Kordofan. In reaping the dura



FIG. 1.—REAPING KNIVES FROM NORTHERN KORDOFAN × ABOUT $\frac{2}{3}$.

the heads are cut off with only a few inches of stalk, the stems being left in the ground till thoroughly dry, when they are pulled up and used for fencing, thatching, etc. The specimens photographed were collected from the Dar Hamid tribe, but they seem to be in general use.

Apart from their interest as examples of a primitive form of tool—one which in Africa may be thought to have preceded the Egyptian type of sickle, consisting of a number of flints fixed in series in a wooden handle—they repeat the shape, and

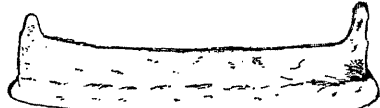


FIG. 2.—BLADE OF REAPING KNIFE $\times \frac{1}{2}$.

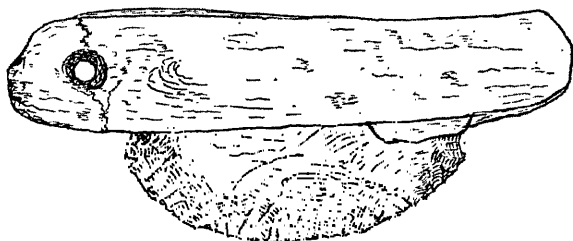


FIG. 3.—KNIFE WITH STONE BLADE FROM SWISS LAKE DWELLING $\times \frac{2}{3}$.

perhaps indicate the purpose of a form of stone knife found in Europe in neolithic times, *e.g.*, in the pile-dwellings of Locras, whence comes the specimen—now in the Sturge collection—shown in Fig. 3.

C. G. SELIGMAN.

Anthropology.

Elliot Smith.

The Cranial Cast of the Piltdown Skull. *By G. Elliot Smith.*

82

Certain of the statements made by Professor William Wright in MAN, 1916, 73, are too inaccurate to be permitted to pass unchallenged. On p. 126 he states: "It is unfortunate that Professor Symington's criticism of Professor Elliot Smith's interpretation of the endocranial cast was not published in time to be incorporated in the volume [Professor Keith's *Antiquity of Man*], for only in a less degree than Professor Keith's criticism does it succeed in finally disposing of the ill-fated first essay at reconstruction and of many of the opinions based thereon."

Professor Symington has not discussed the mode of reconstruction. This perhaps is fortunate, for until (early in 1914) I sent him photographs showing the sutures in the region of the bregma, Professor Symington was denying their presence in the fragments.

Nor does Professor Symington's criticism affect the accuracy of my account in any respect. The points with which it deals all appear in Professor Keith's description of the cranial cast. But the history of Professor Symington's onslaught is not without interest. In my preliminary note on the cranial cast I referred to the peculiar boss in the temporal area, which I stated "assumes quite a special interest when it is remembered that this obviously expanding area occupies the position where in the modern human brain is developed the territory which recent clinical research leads us to associate with the power of 'spontaneous elaboration of speech and 'the ability to recall names' (Adolf Meyer)."* Everyone who has read an elementary text-book of physiology or medicine knows that this refers to the posterior end of the *second* temporal convolution. But not Professor Symington! A few days after the memoir was published he wrote asking me to lend him Meyer's paper. As I had already lent it to someone else I sent him a larger memoir by the same writer on the same subject, in which the author emphasised that he was discussing lesions of the *second* and not the *first* temporal convolution. But even this failed to make any impression; for at the meeting of the British Association in Melbourne Professor Symington made an impassioned attack upon my

* *Quart. Journ. Geol. Soc.*, Vol. LXIX, p. 147.

account of the Piltown cranial cast, the burden of which was, that I had described as a protuberance on the *first* temporal gyrus what was really a projection upon the second. I pointed out to him in the public meeting that I had not referred to the *first* temporal gyrus, but to the *second*, and suggested that as he was confusing the auditory receptive centre with the so-called "word centre" of Wernicke it would be well to look up the distinction in some student's manual of physiology.

In spite of this public exposure Professor Symington repeated his attack at the Anatomical Society, again making the question of the temporal gyri the main point in his charge. Again I exposed his amazing misrepresentation. But this time it took effect, because this, his main criticism, was omitted from his published paper.

All of his other criticisms apply with greater force to Professor Keith's account than to mine.

There is one point, however, to which I must refer. Professor Symington made a great point of the fact that a variety of reconstructions of the skull had been made. Therefore he assumed that my preliminary report could not be accurate. He overlooked two facts, however: Firstly, that I called Dr. Smith Woodward's attention to the slight error in the occipital region, which especially affected the form of the right side, *before* I wrote my report; and, secondly, that I described the left side only, and made due allowance for this error. Thus the force of Professor Symington's attack loses all its cogency.

In conclusion, I should like to point out that what Professor William Wright is pleased to call "the ill-fated first essay at reconstruction," with all its admitted faults, is a closer approximation to the truth than any of the reconstructions for which Professor Keith has made himself responsible. This is a fact, the truth of which any anatomist who carefully examines the specimens and the whole literature of the dispute can convince himself.

G. ELLIOT SMITH.

REVIEWS.

Craniology.

Turner.

A Contribution to the Craniology of the People of Scotland. By Sir William Turner, K.C.B. (Reprinted from the *Transactions of the Royal Society of Edinburgh.*) Edinburgh: R. Grant and Son. 1915. **83**

This important contribution consists of two parts, which were published separately in the *Transactions of the Royal Society of Edinburgh*.

The first part, communicated in 1902, contains an account of 176 modern and mediæval crania, collected from different parts of Scotland, ranging from Shetland in the north to Wigtonshire in the south, from Iona in the west to Dunbar in the east, but although the range is so great, most of the skulls have been obtained from the counties south of the Clyde and Tay, and so the work must be regarded chiefly as a contribution to the craniology of the Lowlands.

Where it is possible 43 measurements and indices of each skull are given, but, as is usually the case, the lower jaw is only present in a comparatively few specimens.

One of the first things which strikes one in reviewing the report is the great disparity in the numbers of the sexes. In Fifeshire, for instance, there are fourteen male skulls to four females, in East Lothian twelve males to four females, and this is a point which needs careful consideration.

In working through large collections of bones the reviewer has always been struck by the preponderance of males, and has accounted for it by the greater strength and resistance to disintegrating agencies of the male bones, but it must

always be borne in mind that the power of any anatomist to distinguish the sex of a skull or any other part of the skeleton is an unknown quantity, and those of us who have checked our capacity by sexing skulls which could be identified afterwards have learnt some wholesome though humiliating lessons in this respect.

The probability is that no anatomist—not even Turner—can be sure of sexing more than six or seven out of every ten skulls correctly, so we must be very careful not to deduce sex characteristics from skulls which have been arbitrarily sexed.

On the other hand, the uncertainty of sexing in all probability cuts both ways, and Turner's collection bears out our general impression that in any collection of exhumed or roughly stored bones more male than female remain fit for the callipers. From an ethnological point of view we should have expected that the Lowland Scottish crania would have approached the Anglo-Saxon type more closely than do those from south of the Tweed, and it is interesting to find that the cephalic index of the former is 77·3, which is lower than that of mediæval English skulls.

It is pointed out, however, that a considerable brachycephalic element exists in East Scotland, particularly in Fife, the Lothians, Forfar, Kincardine, and Banff.

There are some beautifully executed plates, but as no scale accompanies them, and different views of the same skull are often drawn to different scales, they are not nearly as useful for modern purposes as dioptographic tracings would have been, though of course they are much more artistic.

The absence of tracings drawn to scale is the more felt since the recorded measurements are not so planned that a skull can be accurately reconstructed from them or a type skull of any locality plotted out.

The second part of the memoir deals with the prehistoric crania, and was communicated in 1915. It is a most valuable and up-to-date review of the various discoveries in Scotland, and, in addition to the description of the crania, makes a good summary of the ethnography of the various races which have helped to form the Scotsman of to-day.

F. G. PARSONS.

East Anglia: Prehistoric Society.

Clarke.

Report on the Excavations at Grime's Graves, Weeting, Norfolk. Edited by W. C. Clarke. 254 pp., with 30 Plates and 86 Figures. London: H. K. Lewis & Co., 1915. 5s. net. **84**

"Grime's Graves" has been long known as one of the most important prehistoric sites in our country, as well as one about which there has been most uncertainty. It was, therefore, high time that the old evidence regarding it were re-examined, and that new evidence were sought by further excavations. This has now been done in a manner which leaves little, if anything, to be desired. The fact that certain questions are still in doubt is in no way the fault of those who have had the work in hand, nor is it altogether to be regretted, for it will keep alive an interest in the "Graves" and tend to encourage a closer study of flint implements. We are glad, too, that certain of the pits are still unexplored, for there will no doubt be many questions in the future for the solution of which a direct reference to the unopened pits in this area will be desirable, if not indispensable.

The Report of the excavations has been written by Mr. A. E. Peake, M.R.C.S., L.R.C.P., and displays throughout a true and correct appreciation of the essential facts for arriving at conclusions on the various points at issue. It is written in an eminently clear and interesting style, and is so arranged that comparisons between the two pits recently excavated and the pit opened by Canon Greenwell in 1870 can be readily and easily instituted.

The subjects of which Mr. Peake treats have made it possible for him to avoid almost entirely controversial questions, and his task has, for this reason, been relatively light. Perhaps the only matter upon which a difference of opinion is possible is the question whether any of the markings on the walls of the pits were due to the use of a polished celt or not. He expresses himself finally as having no doubt that a few of the markings were produced by such a tool, but confesses to surprise that, judging from the very small number of such markings, a tool so superior to a deer-horn pick should have been, apparently, so infrequently used.

The manner in which the shafts were sunk, the symmetry of their outline, the holes cut in the walls for joists, the provision for ventilation, the rope marks over the heads of the galleries, and the general principles on which the mining operations were conducted, all indicate a civilization which, as Mr. Peake says, was probably higher than that attained by any race of savages now living. The finger-prints of the miner still present on the handle of an antler pick have, too, a sentimental interest for us which probably everyone will appreciate.

If Mr. Peake has avoided controversy, Mr. Reginald A. Smith is, on the other hand, in the very centre of it, for to him has been left that portion of the Report which deals with the flint implements. As at most prehistoric sites, the date of Grime's Graves is only to be fixed on the archaeological evidence, and Mr. Reginald Smith, relying on the chronological value of "form" and on the classification of industries by horizons as worked out by French and Belgian archaeologists, brings forward a large body of evidence in support of his view that the date of the "Graves" is Aurignacian. Again and again he describes and figures specimens which are of true Aurignacian pattern, while he pertinently points out that, with the single exception of a basalt celt found by Canon Greenwell, none of the characteristic neolithic implements has ever been found, despite the length and minuteness of the search. He further suggests doubt as to the above celt having been found below the surface.

To those who find a difficulty in ascribing to a Palæolithic period a site at which fragments of pottery have been found, he quotes M. Dupont and Dr. Rutot for the association in Belgium of pottery with a Palæolithic industry.

It is rare, if ever, that we can obtain a consensus of opinion as to the date of a prehistoric site, but we believe that the impartial reader of the Report will admit that Mr. Reginald Smith has presented a very strong case, and we venture to think that the future will prove the accuracy of his views.

The human remains found in the pits are described by Professor Keith, but, as is usually the case, they furnish no reliable data for determining the age of the site.

Messrs. Kennard and Woodward report on the Mollusca found, and conclude from the evidence they furnish that the "Graves" are Post-Pleistocene but Pre-Roman.

The Report concludes with a translation of a very interesting article by Dr. Nils Olof Holst on certain Swedish flint mines. These mines were surrounded by dwellings which seem to have been of Neolithic, Bronze, and Early Iron Age. The illustrations in the Report are both numerous and excellent, and the photographers, of whom there are several, must have displayed great ingenuity in taking such excellent photographs of pit-bottoms and underground passages.

The Report reflects the greatest possible honour on all concerned, including the East Anglian Prehistoric Society, under whose ægis the Report is published, and Mr. W. C. Clarke, who has most ably performed the duties of Editor.

WILLIAM WRIGHT.

PROCEEDINGS OF SOCIETIES.

Abstracts of Papers presented to Section H at the British Association Meeting, 1916.

85

Magic and Religion. By Dr. F. B. JEVONS.

Those proceedings alone are regarded as magical by any community which the community resents and condemns. Proceedings practised for the good of the community are not regarded by the community as magical. There is no reason to believe that there has ever been an "age of magic"—an age in which proceedings of the one kind alone were practised. If, then, ceremonies practised for the good of the community are not magical, we ought to term them religious; and since such ceremonies need not, and in some cases do not, contain any reference to beings superior to man, we should set aside the definition which describes religion as belief in personal beings superior to man. Nevertheless, belief in such beings is essential in most forms of religion.

The fact that no definition of an acorn can be a definition of the full-grown oak does not disprove the continuity of the process whereby the acorn becomes an oak. "Tree" is a term which includes, or is applicable to, all stages in the process of growth, from the first to the last—to the acorn, the sapling, and the oak alike. And so, too, religion is a term which includes, or is applicable to, all stages in the one process, and not to the stage of monotheism alone, or polytheism alone, or merely to stages in which there is reference to personal beings. Each of the stages is a stage in the process of religion, but no one stage is by itself the whole process. To assume that belief in beings superior to man existed in the earliest stage of the evolution of religion is open to exactly the same objections as is the notion that the oak exists, "preformed," in the acorn.

The evolution of religion has been a process both of change and of continuity—of change in continuity and of continuity in change—a process in which the very differences postulate similarity, and the similarity implies differences. The earlier stages of religion would not have been practised unless they had been thought worth while—unless they were felt to have some value. And the value of religion is felt mainly, if not wholly, in the frame of mind, or state of spirit, produced. Such a state of mind or spirit is felt (*e.g.*, by the Australian black-fellows) to be the highest of all. Its value, we may say, is felt to be supreme.

Accepting Sir James Frazer's view that between magic and religion there is "a fundamental distinction and even opposition of principle," we cannot hold with Dr. Marett that it is "best to treat all magico-religious rites as generically akin." Magic and religion are generically different. Amongst the Australian black-fellows, as everywhere else, magic, in the opinion of the community, belongs to the class of things bad; and in every community religion belongs to the class of things good, and is supreme in that class. From the point of view of tribes that believe in magic, there are rites which are magical and rites which are religious; but there are no rites which are "magico-religious," for to such tribes magic means what is condemned by the community, while what is approved by the community belongs to the sphere of what we call religion.

Personal Experience as an Element in Folktales. By BARBARA FREIRE-MARRECO.

Psychologists have pointed out striking resemblances between dreams—especially children's dreams and those of adults of "infantile" mentality—and the myths of uncivilized peoples. There is a tendency to account for them by assuming that "myths are the dreams of the race" or that "dream-thinking is an archaic form of thinking."

On the contrary, the writer believes that these resemblances are to be explained, not by a semi-mystical analogy between the childhood of individuals and a "childhood of the race," but by supposing that very many folk-tales are founded on reported dreams, day-dreams, and trance-experiences. Some stories are professedly derived from personal experiences of this kind; others bear internal evidence of such an origin.

Examples of such types are given from American folklore—Visits to the Dead; Visits to the Sun; Sky-journey; Bridge of Souls; Symplegades; Cinderella; Beanstalk, etc.

Some of these folk-tale incidents, founded on reports of personal experience of a fairly common type, naturally reappear in every generation in all unscientific societies. Hence their geographical distribution is no evidence for the diffusion of cultures. But these incidents are re-handled, elaborated, systematized, combined with other incidents and put into artistic form; and it may sometimes be possible to trace the diffusion of the more elaborate versions and combinations.

Organisations of Witches in Great Britain. By M. A. MURRAY.

One of the chief difficulties in the study of witchcraft is the language in which the records of the trials is couched. Another difficulty lies in some of the statements made by the witches themselves. But in spite of these difficulties it is clear that the witches professed and practised a definite form of religion, with dogmas, rites, ceremonies, and festivals. The chief festivals or Sabbaths were held four times a year: at Candlemas, Roodmas, Lammas, and Hallowmas, *i.e.*, the four quarter days of the May–November year. The master or chief of the witches, called by the Christian writers "The Devil," was regarded by the witch-community as the incarnate god, incarnate in a man or, when disguised in the skin of an animal, incarnate in that animal. The ritual of admission into the society is given with great particularity; it consisted of renunciation of any previous religion, dedication of body and soul to the god of the convert's new religion, vows of absolute obedience, baptism and the giving of a new name, and finally either the signing of a contract or being marked upon the body, possibly by tattooing. By the sixteenth and seventeenth centuries the whole ritual and religion were decadent, though in Scotland they remained in force till a later period than in England.

The Origin of the Actor and the Mask. By PROFESSOR RIDGEWAY, SC.D., F.B.A.

An examination of the Greek drama and its descendants in Europe, and also a survey of the dramas and dramatic dances of non-European races from Western Asia to Japan, through the Indian Archipelago, Australia, Melanesia, Polynesia, East and West Africa, South and North America (including the Eskimo) leads to the conclusion that tragedy and other serious drama originated in the honouring or commemoration of the dead; such pantomimic dances, representing the events in the life of the dead (as in ancient China), being, like funeral games, dirges, athletic contests, panegyrics, &c., a means of keeping the dead in remembrance, and thus propitiating their favour.

1. The wearing of masks has been, and is, a concomitant of such "mimetic dances; as in Torres Straits, Ceram, and in the dances of the secret societies of Melanesia, Polynesia, West Africa, the object of which is the cult of the spirits of the dead, whilst masks are also used by the American Indians and Eskimo in like ceremonies, as they are and were in the more highly developed dramatic performances of Java, China and Japan, Ancient Greece and Rome.

2. In the cases cited the masks represent usually the spirit (often of some deified chief) in whose honour the ceremony is held, and this holds true of the masks used by the Chinese and Japanese.

3. But there are cases in which the dramatisation of the dead takes place even before the burial. Amongst the Tangkuls of Manipur the dead person is not only represented by some living member of the community, who dresses in the clothes of the dead, and takes his place at the family table, until the last rites are performed, but is actually regarded as the residence of the spirit of the defunct until its final send-off to the spirit-land. In other words, the Thilakapo is a medium. Again, in Burma, in the festivals of the thirty-seven official Nats (many of whom are individuals who lived only a few centuries ago), each Nat is supposed to enter for the time being the individual who personates him or her—in other words a medium. In ancient China the spirit of the ancestor when worshipped was supposed to enter a living person, usually a boy; later replaced by an image of the dead, in its turn replaced by the well-known tablet, into which the ancestral spirit is supposed to enter when worshipped.

In the Japanese Kagura (from which arose Japanese Tragedy), which is an essential part of the Shinto ritual in honour of the dead, the spirit who is being honoured is supposed to enter the Miko (virgin priestess), who performs the sacred dance, whilst among the numerous savage communities cited above it is generally held that the spirit of deity invoked enters the masked shaman or other performers. In the Hindu religious plays the actors are usually Brahmins, because for the time being they are taken to be equivalent to gods, a statement which points to a like idea as that found elsewhere.

4. Ancient Rome supplies a close analogue to the Thilakapo of Manipur, for at funerals the dead man was personated by an actor (*mimus*), dressed and masked to represent the dead, who even imitated his peculiarities of gait and speech. Moreover, attendants wearing the masks (*imagines*) of the dead man's ancestors (which were carefully preserved in Roman houses), and dressed to represent them, and if they had been consuls, etc., accompanied by lictors, etc., brought the dead man to the family grave. Was the *mimus* once regarded as the *medium* of the dead, and were the masked men also once regarded as the temporary receptacles of the ancestral spirits?

5. Finally, Thespis, who first lifted Greek Tragedy from being a mere ritual at a tomb into a great artistic and literary form, never wore any but white masks. But as the Greeks represented by white paint the complexion of ghosts, for this reason Thespis probably wore only masks of this hue. If the actor was still regarded as the temporary abode of the hero's spirit, Solon's anger against Thespis is explained.

6. We are thus led to the conclusion that the actor originally was not merely an actor but rather a *medium*.

Early Christian Monuments in Northumbria. By W. G. COLLINGWOOD, M.A., F.S.A.

In the North of England and South of Scotland there are about a thousand fragments representing monuments of types neither Roman (and earlier) nor Norman (and later). They include crosses, shrines, tombs, grave-slabs, and pieces of architectural detail, ornamented chiefly with plaits and scrolls, in motives common to Christendom, but applied in forms peculiar to the British islands. In classing them we have therefore only occasional help from comparison with Continental art; but when they are arranged in series, their development and dating can be checked from point to point by evidence of various kinds.

At the beginning of the series we may place the Whithorn group of unshaped stones with *chi-rho* monogram and early Latin inscriptions resembling those of the early Welsh Christians. These connect with St. Ninian's church and may date fifth

or sixth century; but, like that church, the type disappears, leaving no immediate successor.

On the other hand, monuments like the cross of Gosforth, Cumberland, must be of the late tenth or early eleventh century, because they bear allusions to the Norse *edda*, which was not current at that time; and they do not bear the late or Scandinavian runes seen on the Manx crosses of the late eleventh and twelfth centuries, otherwise analogous. A considerable series of Anglo-Danish and Anglo-Norse monuments connects with this group, and is marked by vigorous design and sketchy handling, rude figures of men and animals, simple plaitwork, usually zoomorphic, and the absence of foliage and flowers. It resembles stone-carving in Denmark and Scandinavia of the tenth and eleventh centuries; but contains occasional Irish motives, explained by the connection of the Vikings in England with those of Ireland. To the first-mentioned group was Welsh-Celtic, so some of these may be called more or less Gaelic-Celtic; and the fact partly justifies the popular name of Celtic applied to all such crosses, which were first known at Iona and in Ireland before the English examples were studied.

But there remain many stones differing in their ornament from any Celtic and Scandinavian monuments, and of still greater interest, as finer forms of art and earlier in date. These bear fairly well-drawn saints and angels, elaborate symmetrical plaits, and leaf-scrolls like those of continental design in the eighth century. A close analogy is the Ormside cup, which can be shown to be earlier than 900 A.D. Eighth-century coins of York bear figures of beasts such as occur in one group of this class. The inscriptions, in Latin and Anglo-Saxon, use, when runes are used, the older runes, which disappear in the tenth century; and personal names are never of Danish, still less Norman, form. The acanthus of the eleventh century is absent; all evidence points to a pre-Danish date for this series, of which there were very fine examples at Easby, Cundall, Otley, &c., now reduced to fragments; and the much-disputed crosses of Bewcastle and Ruthwell appear to be instances, better preserved, of the same series.

In this series, schools and lines of development can be traced; the general form, the scrolls, and the plaits, &c., all show transition from continental models to the stock-patterns of English carvers. By such hints the place of each can be approximately found in the series, which went forward in full progress, from severity to floridity, until the Danish invasion of 867. The heathen Danes, rapidly converted, did not entirely destroy monumental art, but used it; at first continuing the English traditions, but naturally in a state of decline. Many examples remain of the transition from the pre-Danish Anglian to the Viking Age style, showing how the latter is an adaptation of the former by the gradual debasement of figure-drawing, the simplifying of interlaced patterns, and the conversion of scroll-work, foreign to Viking taste, into the dragonesque ornament of the tenth century. In this process the Leeds cross is a link between the debased Anglian and nascent Scandinavian, dating about 920 A.D.

The history of Northumbrian sculpture can, therefore, be stated broadly, and illustrated step by step, though much remains to be worked out in detail. Starting from the Tyne valley, where the free-standing ornamented cross appears to originate after the building of Hexham, Jarrow, and Monkwearmouth churches, the art spread along main (old Roman) routes in every direction over the old kingdom of the northern Angles, from the Forth to the Humber, and in the later eighth and the ninth centuries influenced neighbouring countries. When the Danes and Norse came they accepted and gradually adapted the art, transforming it to their own taste. During the eleventh century it disappeared from Northumbria, though surviving in Ireland and Scotland, and was followed in England only by the boundary, market and station-crosses of the post-Conquest periods.

Artificial Islands in the Lochs of the Highlands of Scotland. Excavation Work on the Crannog in Loch Kinellan, Strathpeffer. By HUGH A. FRASER, M.A.

In the 1913 Report a grant was made by the Carnegie Trust to Dr. Munro for the excavation of the island in Loch Kinellan. In August 1914 I started work on the island, and was fortunate in having the assistance of the Rev. Odo Blundell at the outset, and later on the advice of Dr. Munro, who visited the island, and stayed in the vicinity for a week.

The work done in 1914 established the island as artificial, a point on which there was previously some doubt. Pits dug over the surface of the crannog revealed in every case a platform of logs or brushwood, or compact occupation débris, underneath a superincumbent mass of earth, clay, and stones some 4 feet thick. Unfortunately, digging was greatly impeded by water percolating through the structure of the island from the loch. This not only delayed the work, but caused additional labour, which exhausted the grant before the work had reached anything like a conclusive stage.

Persuaded that more could be gleaned from a careful examination of the pits than was learned in 1914, I started work again in 1915. On examining the woodwork with care, I found quite a number of logs with checks, mortise holes, &c. In no instance, however, did the most careful examination reveal these checks and mortise holes as serving any primary purpose. Everything drove one to the conclusion that some at least of the wood used for strengthening the structure of the island had previously been used for some other purpose.

At the east end of the island the overlying mass of earth and stones appears to rest on a platform of brushwood; in the centre and at the west end it rests on wooden platforms. Two pits at the east end, dug to the base of the island, showed underneath the surface material successive layers of occupation débris right down to the original lake bottom, some 7 feet below the present surface. In selected pits situated at the centre and west end of the island, the wooden platforms were pierced and were found to consist of three layers of logs or tree stems. Underneath the platforms there seems to be a succession of layers of habitation débris corresponding to those found at the east end of the island.

In course of the excavations bones, whole and broken, and other kinds of food refuse were found in profusion, as were also pottery shards in the upper strata. The bones have been examined and discussed by Professor Bryce, of Glasgow University, while the pottery has been described by Mr. Curle, Director of the Royal Scottish Museum. The pottery is at present being compared with the pottery found in the Glastonbury Lake Dwellings. The archæological relics include a number of stone implements, one or two whorls, and an ivory playing piece.

Late in the season a dug-out was discovered supporting the logs in one of the pits. A length of 20 feet was exposed when the late autumn floods stopped work for the year.

From the point of view of structure the results obtained have been interesting, and if continued may prove very valuable archæologically. Any approximation to the date of the island, or the dates of its various eras, can only be made after careful comparison of the results with those obtained at other sites—work that involves much labour and time. While further work on the island is very desirable, such work to be of value must be on a more ambitious scale than the funds available have hitherto permitted.

The facts that continuous layers of occupation refuse exist right up from the original bed of the lake, and that much of the woodwork overlying these layers, and supporting the surface material, shows signs of having been previously used structurally, would point to the site's having been originally the location of a pile dwelling

or palifite, the débris from which formed the basis of the more modern crannog. While this suggestion is made tentatively, the theory was not sought, but was reached as a possible and very probable explanation of many circumstances noted in course of the investigation.

Recent Archæological Discoveries in the Channel Islands. By R. R. MARETT, M.A., D.Sc., President of Section H.

The most important finds of the year have been due to the continued excavation of the cave known as La Cotte de St. Brelade, in Jersey, the expenses of the work being borne partly by the British Association and partly by a Government grant provided through the mediation of the Royal Society. Very good results were obtained in 1915, the remains of twenty-eight quaternary species being determined, and many flake implements of a characteristic Mousterian facies being collected. Moreover, along the eastern wall of the cave, where the implementiferous bed is 10 feet thick, two clearly marked horizons were distinguished, the lower stratum containing coarse implements in association with *Elephas? trogontherii*, and the upper finer and more elongated implements in association with *Elephas primigenius* and with a rich rodent bed in which *Myodes torquatus* is the only lemming represented.

On September 3, after some two months' steady digging, the roof of the cave collapsed, obliterating the workings for the time being under about 500 tons of rock rubbish, an amount increased to 700 tons by the winter rains. During the spring the intrusive matter was cleared away, an affair of eight weeks' work, and the bed was again attacked in July.

Good progress has been made along the western wall, which is more sheltered, and masses of fresh bone and flint await analysis. The floor level, which up to 45 feet from the entrance rises only about 4 feet, would seem suddenly to become steeper, as if the back of the original cave were being approached, though the limit of the bed has not yet been reached. Moreover, the rodent remains, which mark the top of the bed, now appear in some places as high as 35 feet above floor level. Only when the eastern side has been cleared, will a theoretical reconstruction of the whole site be possible. In the meantime, one cannot wonder enough at the extent and richness of the human deposit.

Apart from this major operation, there has been much archæological enterprise shown in both Jersey and Guernsey. In the latter island certain doubtful indications of palæolithic inhabitants have appeared, while in Jersey an industry thought to be Magdaliinian has been recovered from several sites. Some interesting Neolithic finds have also been made. Altogether, the islands have proved worthy of their reputation as happy hunting grounds for the archæologist.

Recent Culture on Easter Island and its Relation to Past History. By KATHERINE ROUTLEDGE.

Native culture lasted on Easter Island till about the years 1863 and 1864. On the former date half the population was carried off by Peruvian slave raiders, and the following year Christian missionaries arrived. In 1914 about a dozen old men still survived who possessed some knowledge of old institutions.

The island, according to these authorities, was divided between ten clans, who practised cannibalism and were constantly at war, and legendary lore largely deals with these conflicts. Little information was forthcoming with regard to the statues, although the last one which remained standing on the terraces was apparently overthrown as recently as about 1830. Knowledge still, however, survives of the custom of distending

the lobe of the ear, and of tatooing a ring on the back, both of which customs are seen on the statues. Large wooden images in honour of certain persons were, within living memory, erected temporarily in front of the terraces. The small wooden images are still made, though now only for sale.

Belief existed in a large number of supernatural beings, but there were few ceremonies in their honour. A special sanctity attached to the Miru clan, which was the only one which had an "Ariki" or chief. This Ariki was the authority on the tablets, and gatherings, at which they were read, were held till the Peruvian raid. One old man was interviewed who had had some knowledge of one of the scripts. The "white men who came in ships" were regarded as gods, and ceremonies held in their honour were traced back three generations.

The whole life of the island turned on the finding of the first egg of a certain migratory sea-bird. The rites connected with it show some slight connection with both the tablets and the images, and survived in an attenuated form even after the introduction of Christianity.

Megalithic Remains on Easter Island. By W. SCORESBY-ROUTLEDGE.

The investigations of the Expedition extended over sixteen months, and the printed statements and explanations of former passing visitors were considered and checked on the spot. The Terraces exist principally along the coast, but a few are found inland. They were discovered to vary in type, and only a limited number of them have been constructed to carry images. All have been used for the disposal of the dead. The statues upon them have invariably faced inland and have generally worn crowns. A portion of one image only is now standing and the Terraces are largely in ruins. The mountain, with its quarries whence the great monoliths were derived, was surveyed and much excavating done, with the result that it is possible to speak definitely as to the method of sculpture and the tools employed.

Certain prostrate and scattered images, generally supposed to have been abandoned in process of removal, were found to have been originally erected on three main roads converging on the mountain. The village of Orongo, consisting of special stone houses of peculiar construction, connected with the Bird Cult, was accurately surveyed, and the large rock masses which adjoin the village, and which are engraved and sculptured, were mapped and photographed.

Contribution to the Study of the Physical Type of the Northern Tungus. By MISS M. A. CZAPLIČKA.

All that Chinese historians tell us about the Tungus (who are known under various names), in the era before Christ and in early historical times, is that they have occasionally given dynasties to some parts of China and Mongolia. In this case, inter-marriage between the Tungus and foreigners was restricted to the royal family and the families of the chiefs. Occasionally we hear of Chinese migrations into Tungus country, as for instance to Korea, but the mixture of Tungus with Chinese and Mongol assumed large proportions only in the seventeenth century, when the Manchu dynasty was reigning over both China and Mongolia.

Only the Tungus who migrated from the Amur country before that time (probably as a consequence of the Jinghis Kan migrations) escaped contamination. By migrating to the inhospitable lands of the northern *taiga* and *tundra* they preserved their physical type comparatively pure. This applies chiefly to the North Central Tungus, between the Yenisei and the Lena, for the North-eastern Tungus have been more affected by contact with the Palæo-Siberians and the Yakut. Even in the study of the comparatively pure type of the Tungus of North Central Siberia, however, we have to take into account their contact with the Yakut along the

Yessei-Khatonga line, and also the influence of environment. This latter is most clearly seen in their religious and social customs and in their technique.

The anthropological study undertaken by our Expedition deals with the Tungus whose genealogical table shows no foreign admixture for several generations back, as well as with the Tungus who have inter-married with the Yakut. The Tungus metises we have divided into three groups :—

1. The Tungus-Yakut, or people with Yakut father or mother.
2. The Dolgan, or people who have mixed with the Yakut for so long that they have formed a new nation and forgotten their origin.
3. The Yakut of Tungus territory, or Tungusized Yakut, who have a strain of Tungus blood in them and are called Tungus by the Yakut of the Yakut territory.

In the present paper we make an analysis of four standard measurements—

- (1) The stature,
- (2) The cephalic index,
- (3) The facial index,
- (4) The nasal index,

and compare our measurements on North Central Tungus with those on North-eastern Tungus taken by the American Jesup Expedition.

In their cephalic, facial, and nasal indices the North-eastern Tungus approach the Palæo-Siberians, and the Southern or Baikal Tungus approach the Mongol type, while the North Central Tungus approach the North-eastern, but not so closely the Palæo-Siberian. In other words, the North-eastern Tungus stand between the North Central Tungus and the Palæo-Siberians.

It would be premature to draw any synthetic conclusions about the original physical type of the Tungus, as the material available for the Southern Tungus is insufficient, and as the only data on the North Central Tungus are those collected by our Expedition, and that only in the region within the Arctic Circle. Numerous tribes of Sub-Arctic Tungus between the Yenisei and the Lena remain yet untouched.

The analysis of the measurements taken by our Expedition may be useful not only in defining the physical type of the Tungus, but also in showing that while the first generation of Tungus-Yakut mixture approaches nearer to the Yakut type, the Dolgan, who are the result of many generations of mixture, approach nearer to the Tungus type.

Summer and a Winter Among the Natives of Arctic Siberia. By Miss M. A. CZAPLIŃKA.

The start in spring 1914. The journey by the Trans-Siberian Railway and by steamer to the mouth of the Yenisei. The anthropological work of summer 1914 among the Samoyed-Tavgi, Samoyed-Yurak, Dolgan, and Ostyak. Some native customs connected with marriage, and clan and family life. Shamanistic ceremonies of the Samoyed.

Winter 1914–15 spent in journeying with reindeer sledges among the Tungus of the Northern Tunguska, Khatonga, and Kheta Rivers and the Lake Districts of the northern *tundra* between the Yenisei and the Lena. Methods of investigation. Tungus clan and family life. The shamanistic beliefs existing under the cloak of Russian orthodoxy. The migration of the Arctic Tungus from the Amur country. The journey south, summer 1915. An archæological excursion to the burial places (*kurgany*) along the Southern Yenisei.

The Gurkha and His Mountain Home. By A. TREVOR-BATTYE, M.A. F.L.S.

The writer visited Nepal with Mr. H. J. Elwes in the winter 1913-14, at the invitation of the resident and with the permission of the Maharaja.

Nepal may be described as consisting of three zones—a northern mountain area containing the world's highest peaks, a central highly cultivated valley, and a southern forest area, known as the Tarai. Each has its special fauna, flora, and other characters. The bulk of the inhabitants occupy the central valley, which is terraced as far as possible for purposes of cultivation. The population numbers some 500,000, made up of elements from various races. On the Sikkim border are the Lepchas, to the north the Bhotias or Thibetans, while the central valley is occupied mainly by Gurkhas and Newars.

The Gurkhas claim to be the descendants of Rajputs, and appear to have first obtained a footing in the country in the year 1559, though it was not till 1768 they completed its conquest. The race they conquered, the Newars, were of Mongolian affinities, an industrial and not a warlike people. These characters are still preserved—the Gurkhas being the fighters, the Newars the traders, agriculturists, and craftsmen of Nepal to-day. Intermarriage with the Newars has changed the facial appearance of the Gurkha from the Rajput to the Mongolian type. In religion the Gurkha may be broadly described as Hindu, the Newar as Buddhist. The Gurkha language is of an Aryan type, with Sanskrit as a basis, while the Newar has a distinct tongue and alphabet of his own. There are over 2,000 temples and shrines in the sparsely-inhabited country. Two distinct types of temple may be recognised: the stupa or chaitya form, which is Indian, although it has taken on a local character; and the pagoda form, obviously derived from the Chinese. These are characterised by the wealth of detail in their carvings.

The domestic architecture of Nepal is most varied in design and workmanship, the Newars from time immemorial have been great craftsmen in wood and metal.

Sakai Religion and Beliefs. By I. H. N. EVANS.

It is doubtful whether the Sakai have any original knowledge of a Supreme Being, though one group of them admits that it has a belief in a Deity. There seem, however, to be some grounds for thinking that their ideas on this subject may be derived from the Malays, or, at any rate, in part.

Somewhat vague animist beliefs play a part in the everyday life of the Sakai, and various means are adopted for placating, or exorcising, spirits, who are, or may be, evilly-inclined towards them. Rites with these ends in view are often performed by the Halak, or magician, aided by his familiar spirit.

In addition to beliefs which may be classed as animistic, the Sakai have many other curious superstitions, which are less easy to classify.

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Men of the Old Stone Age, Their Environment, Life, and Art. Hitchcock Lectures of the University of California, 1914. By Henry Fairfield Osborn. $9\frac{1}{4} \times 6\frac{1}{2}$. 532 pp. 268 Illustrations and Maps. G. Bell and Sons, Ltd. 21s. net. (Publishers.)

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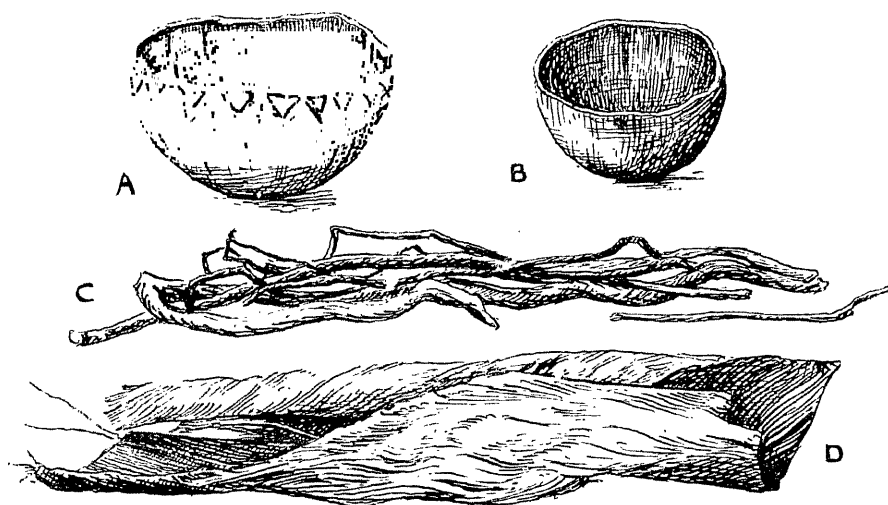
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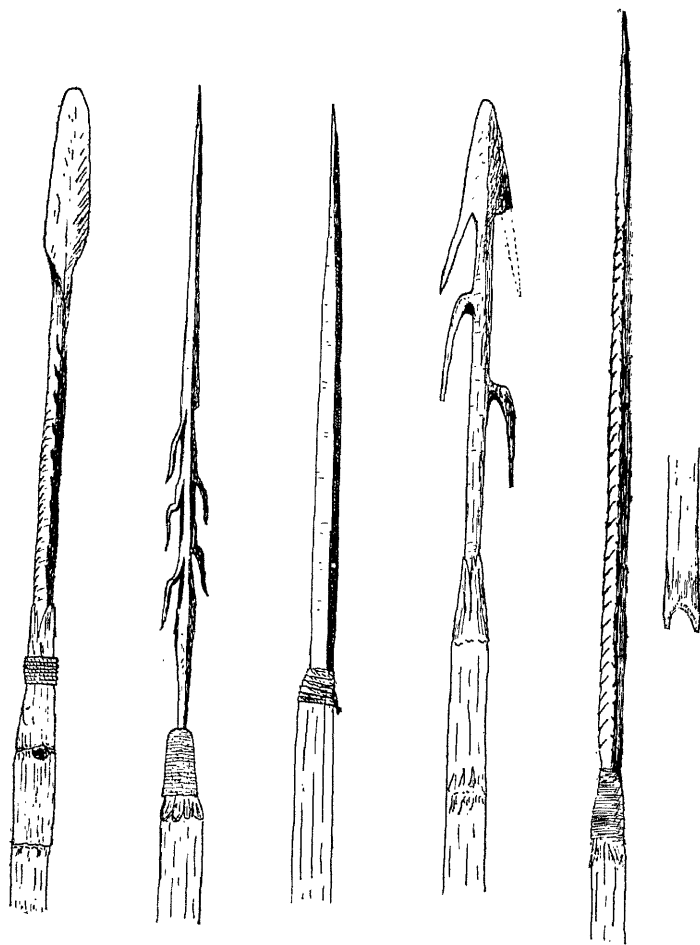
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i.—KAVA ROOT AND BOWLS FROM KIWAI, BRITISH NEW GUINEA.



ii.—ARROWS USED BY THE AGAR DINKA.

ORIGINAL ARTICLES.

New Guinea.

With Plate K.

Haddon.

Kava-drinking in New Guinea. By A. C. Haddon.

87

The custom of drinking kava is recognised as a criterion of a certain definite migration, or series of migrations, into Oceania; its occurrence in New Guinea has long been known, and I have thought it desirable to bring together all the information on the subject in order to facilitate the discussion of the problems arising from its distribution.

The first record of the use of kava in New Guinea was made by N. von Miklucho-Maclay in the *Bulletin of the Imperial Russian Geographical Society*, X [ii], 1874. As this journal is in very few of our libraries, and is printed in Russian, I give a translation of that portion which deals with New Guinea; for this I am much indebted to my friend Mr. E. H. Minns, author of the monumental work *Scythians and Greeks* (1913). The pepper plant and the drink are called by the Papuans of Astrolabe Bay *kéu*, or *káu*, a name very like the Polynesian *kava*. M.M. constantly saw it used at feasts, and noted the results. The plant is a small shrub which is carefully cultivated round their huts or in plantations. The leaves, stem, and root are chewed not only by grown-up men who take part in the feast, but also by boys to whom the drink is still forbidden, and who, together with the women, do not have access to the feasting assembly. An adult man distributes small portions of the leaves, stem, and root, and sees that it is properly chewed, and that the precious stuff is not wasted by expectoration; if the root is hard it is first beaten between stones. The dark green very bitter mass is often taken out of the mouth, put in the palm of the hand, and carefully rolled up into a ball, sometimes about the size of a hen's egg; then again put into the mouth or handed to someone else to chew.

When the mass is sufficiently soft, each of the chewers takes it out of his mouth, rolls it again into a ball, and gives it to the man who had distributed the portions. The latter has by this time provided himself with two large scraped coco-nut shells. One shell with a hole in its middle serves as a funnel, and is put over the mouth of the second; the bottom of the funnel is covered with soft thin grass, which serves as a filter. The chief preparer of *kéu* takes several balls together, and with his hands squeezes out the abundant green fluid in which the balls are soaked. Afterwards he wets the masses with water and squeezes them again, and repeats the process until the water is hardly coloured at all. They sometimes stir the fluid in the filter so as to make the sediment rise and help the filtering. If the fluid is thick they add yet more water.

While the *kéu* is being filtered the preparer is surrounded by the men who are to take part in the feast, and each of them takes out of the bag, which every Papuan always carries, a small bowl made of the shell of a young coco-nut. This bowl is generally well scraped, and the outside often carved, but the inside is covered with a dark green deposit, the remains of long service, as custom does not allow the washing or cleaning out of a bowl in which *kéu* is drunk. In front of the large bowl containing the *kéu* a small space is cleared, and with the blunt end of a spear depressions are made in the earth, in which the bowls of those who are waiting are placed, so that they should not be upset. These bowls are of various sizes, according to the owner's love of the drink. The man who has prepared the *kéu* pours it out into the bowls; the fluid is of a dark green colour and of the ordinary thickness of melted fat which has become a little cold. When all the bowls have been filled, the men who are standing round stretch out their hands and take them, either all at the same time or in turn according to a certain sequence, first the guests, then the old men, and so on. With their bowls in their hands, the feasters

separate to the margin of the clearing in which the feast is taking place, and turning away, drink the bowl of *kéu* and micturate at the same time.

This custom, which is perpetually observed in some villages, appears in others in the form that the men micturate before they drink the *kéu*, or a little after. As *kéu* is unpleasantly bitter, they take away its taste by eating the scraped kernel of a coco-nut wetted in the fluid of the nut which has been prepared previously for this purpose. The amount of *kéu* which they usually drink equals about three or four tablespoonfuls, which is sufficient to produce intoxication in some of them. Those who have drunk more than an ordinary portion fall into a melancholy, sleepy frame of mind; they go away staggering from the people they are talking to, sit down, and stare fixedly at some object, continually spitting, as the bitter taste remains for a very long time in the mouth; finally they fall into an uneasy but heavy slumber. In this state it is very difficult to wake them up or to get anything out of them. The drinking of *kéu* is the first part in an entertainment, nothing is eaten before it, and the drunkards who have taken a large quantity confine themselves to the drink and do not eat anything. *Kéu* is drunk only by grown men (*tamo*); boys before circumcision and women are forbidden it. No feast takes place without *kéu*.

In the villages where a great deal is grown, adult men drink it also at ordinary times, and even women are secretly very fond of it, and drink it, hiding the fact from their husbands and sons. Not only are fresh leaves, stem, and root used, but also the root, after having been dried and kept for many months, is chewed, and yields a yet more bitter and stronger drink.

In spite of the not particularly attractive process of the preparation, Miklucho-Maclay, wishing to know the effect, once drank an ordinary portion of *kéu*. The drink proved to be without special scent and of a bitter, astringent taste. After a little time he felt his head swim and his legs refused to support him, but this effect passed off after half-an-hour's sleep. He woke up with a fairly fresh head but with a horrid bitter taste in his mouth which remained for three hours after drinking.

Kéu is the only intoxicant of this coast and is very highly valued. Miklucho-Maclay gives a brief account of kava-drinking in *Natuurkundig Tijdschrift voor Nederlandsch Indie*, XXXV, 1875, p. 66, but does not add anything to what he had previously written, as given above.

Biro gives very little information about kava-drinking in Astrolabe Bay; he says it is only partaken of by older men, and solely after feasts or on other great occasions. He describes and figures six coco-nut kava bowls, which are called *keu-gamban* at Bongu and *kial-gamban* at Bogadji (or Bogadjim); most are mainly decorated with zig-zag lines, but one very old and greatly-prized specimen has an engraved border representing conventional hen's eggs (*tue-taue*), and footprints of a pig (*bel nyinyem*): "This design is quite natural in view of the important rôle of the "hen, and still more of the pig, in the feasts of the Tamol" [as the natives call themselves] "Beschr. Catalog. der Ethnogr. Sammlung Ludwig Biro's aus Deutsch-Neu-Guinea (Astrolabe Bai)," *Ethnogr. Samm. des Ung. Nat. Mus.*, III, Budapest, 1901, p. 102.

O. Finsch very briefly refers to Miklucho-Maclay's observations in *Samoafahrten*, 1888, p. 61, and in *Annal. K.K. Naturhist. Mus. Wien*, VI, 1891, p. 66 [204], where he says he could not obtain any data on kava-drinking: "Since the kava plant "grows wild all over German New Guinea, presumably kava-drinking is widely "spread." This, however, by no means follows. In his great work *Südseearbeiten*, Abh. d. Hamburg Kolonialinstituts, XIV, 1914, p. 313ff, he gives a useful summary of the use of kava in Oceania, but does not add anything fresh to what he had previously said on the subject so far as New Guinea is concerned, but in a footnote on p. 314 he says that two varieties of *Piper methysticum* are used, and that four

species are mentioned by K. Schumann and M. Hollrung, "Die Flora von Kaiser-Wilhelms-Land," 1889, *Nachrichten über K. W. L. und den Bismarck Archipel*.

F. S. A. de Clercq and J. D. E. Schmeltz, *Ethnogr. Beschrij. van de West-en Noordkust van Nederlandsch Nieuw-Guinea*, 1893, p. 201, give a very brief account, but with some inaccuracies, of the use of kava in New Guinea. They mention the following references which I have not been able to consult. Hollrung [M.], *N. K. Wlhd.*, 1887, p. 178, and Zöller [H.], *Deutsch Neu Guinea* [1891], p. 253. In their Table I, p. 244, for the distribution of kava, they give Astrolabe Bay and Constantine harbour on the authority of Finsch, and Finsch harbour and Cape Cretin apparently on the authority of de Clercq.

R. Neuhauss, *Deutsch Neu Guinea*, I, 1911, p. 276, adds nothing to the subject. G. A. J. van de Sande refers only to Biro, and adds, "Kawa . . . is, as far as I am aware, never used in Netherlands New Guinea," *Nova Guinea*, III, 1907, p. 14. He had, however, overlooked the following.

J. D. E. Schmeltz states, on the authority of H. Velthuyzen, *Jaarboek van de Kón. Nederl. Zeemacht*, 1893-94, p. 449, that among the Tugeri of the south coast, near the British boundary, a root is chewed by the women, and the juice, which they spit out into a coco-nut shell, is drunk by the men. He adds that as we have records in other places in New Guinea of the use of kava, it is permissible to presume that it occurs here also, *Inter. Arch. f. Ethnogr.*, VIII, 1895, p. 157. Assuming this to be a genuine case of kava-drinking, it should be noted that this is the only instance in which women chew the root, as we cannot accept Bevan's statement that virgins chew it in Kiwai (p. 1242), and it is the only locality for Netherlands New Guinea. R. Pöch says that "the Kaja-Kaja [Tugeri] know three drinks: pure water, coco-nut water, and *wati*, an intoxicating, alcoholic drink made by chewing a kind of kava root. *Wati* is drunk twice daily—morning and evening—always in small quantities, out of the half of a dwarf coco-nut shell of the size of a ladle. Excess is probably rare." (*Sitz. K. Akad. Wiss. Wien*, CXV, 1906, p. 898.)

The first record of the use of kava in British New Guinea is due to L. M. D'Albertis, who says that when he was at Mawata, Maino "brought me some roots of a plant which the natives chew for its narcotic and intoxicating properties. Maino explained that to experience its intoxicating effects perfectly, tobacco should be smoked after chewing a certain quantity of the root"; it induces sleep and pleasant dreams (*New Guinea*, II, 1880, p. 197).

S. McFarlane says it is used near the Fly River, being chewed by boys (*Among the Cannibals of New Guinea*, 1888, p. 126).

E. Beardmore states that *komata* is drunk at Mawata during the feast which is held when lads arrive at puberty; it is obtained from a plant grown locally. No ceremony is held when girls arrive at puberty, but a feast is given at which *komata* is not drunk (*Journ. Anthr. Inst.*, XIX, 1890, p. 460).

In some ethnographical notes on the Western Tribes, more particularly the coastal peoples, B. A. Hely says that *gamada* is *sabi* (tabu) to boys below the age of puberty, and that the dugong harpoon and rope are anointed with *gamada* before the fishing begins. This makes them strong (*Annual Report British New Guinea*, 1894-95, p. 44).

The Rev. E. Baxter Riley says, "The drinking of *gamada* is greatly on the increase in the division. It is no unusual sight to see natives rolling about like drunken men in the coastal villages. This is often seen at Daru on a Saturday night. The drinking of this [*gamada*] is sapping the energies of the natives, undermining their constitutions, and will, if not checked, have a serious effect upon the population, and prevent its increase." (*Annual Report*, 1909-10, p. 157.) The Government has now made it penal to drink or even possess *gamada*.

When at Mawata in October 1911, G. Landtman wrote a letter to me in which he says: "*Gámoda* is drunk here everywhere. The natives chew it with water, empty the contents of the mouth in the leaf-sheath of a coco-nut palm, which they twist, and the liquid is filtered into a coco-nut bowl. This is generally done for the elder men by a boy, who often is not yet allowed to drink it himself. The root may sometimes be hammered with a piece of wood, or cut up with a knife or shell to facilitate chewing, but it is always chewed. *Gámoda* plays a prominent part in several ceremonies. Part of the ceremony of making peace with another tribe consists in the men drinking *gámoda* together; during the drinking-feast one man of each side will sprinkle a little *gámoda* over the assembled people and say, 'No more fight now, no good you me (we) fight.' This rite is called *karéa* and is performed in an analogous way on a number of different occasions and for different purposes. When the natives sit and drink *gámoda* together at the time when they plant their gardens, they dip a twig of the *gámoda* plant in the bowl filled with the fluid and sprinkle it in the direction of the gardens, thereby invoking the *Étengena* or *Sáme*, two closely-related mythical beings who are supposed to help them in their gardening. The *Étengena* reside in trees, and the *Sáme* in swamps. A corresponding practice precedes dugong and turtle-hunting expeditions to the reefs. To the people here *gámoda* seems to be almost essential to ensure success in garden work. That is why quite a little conflict has arisen when the Government and the Mission try to do away with it. I have never heard the natives express themselves with such indignation against the white people as when they think they are going to be deprived of *gámoda*: 'We fright Jesus Christ one thing; we fright *kaikai* too. White man ask me fellow look out missionary, give *kaikai*, no fault belong me. What name want to stop that thing? that time *kaikai* belong me fellow finish.' Which may be re-stated as follows: 'We fear Jesus Christ, but we are also frightened about our food. White men ask us to feed the missionary; then why do they want to stop this practice? If we do our food will perish, and that will not be our fault.' He adds that, "it seems doubtful whether betel-chewing was ever an indigenous custom within the Kiwai-speaking district, though it was undoubtedly practised here to some extent."

The Mawata people may have learnt the use of kava from the Masingara, who were partially dispossessed of their land by the Mawata immigrants about 1800-10 (J. B. Cameron, *Annual Report*, 1892-93, p. 68; B. A. Hely, *ibid.*, p. 70). The Masingaramu, as B. A. Hely calls them, claim to be the sole and aboriginal occupants of the land (*Annual Report*, 1893-94, p. 55). Macgregor says that the local *Piper methysticum* is a small variety about 2 feet high, all of a green colour, the stem much knotted, and the root consisting of a large number of small fibrils. It is the custom of the Masingara to drink kava when they have any important business or undertaking to discuss. On this occasion, when a number of men from the coast were present, a man chewed the root fibrils and the stem; any man of an obliging disposition did this, but as a matter of politeness it was generally done by a Masingara man. The chewed mass, with a little water, is squeezed through the cloth-like leaf sheath of the coco-nut palm into a small dish consisting of one half of a coco-nut shell. One man drank this off without any ceremony or remark; then a mass was chewed for someone else, and the same process was gone over indefinitely. "The two Fijians of the party pronounced the plant to be 'very strong,' but they were much amused by the extremely primitive and unceremonious way in which it was drunk. . . . Here only the chewer and the drinker take any interest in the proceeding, everything is dirty, and the whole affair rather repulsive than otherwise. . . . Some of the tribes of the Fly River know of the custom, and sometimes obtain small quantities of the plant from the inland tribes; but none of them cultivate

"it themselves or make any ceremonial use of it. It is almost surprising that the tribes in the central and eastern districts do not use the *Piper methysticum* as a beverage, because several species of the plant grow there in the forests." (W. Macgregor, *Annual Report*, 1890-91, pp. 46, 47; cf. *Journ. Anthr. Inst.*, XXI, 1891, p. 204.)

According to B. A. Hely, all the people of a Masingara village combine to erect a house, the owners providing them with food and *gamada* while the work is proceeding (*Annual Report British New Guinea*, 1893-94, p. 55). A breach of *mitse* (tabu) has to be healed by the offender supplying food and *sie* (*gamada*) for one whole day. At the large hunting dances the men dance in a circle round two well-executed effigies of crocodiles (*sible*); one is about 8 feet long, and represents Nugu, whom Hely describes as the deity of the Masingaramu, the other is about 4 feet long, and represents Ulbe, his young one. The effigies are refreshed with libations of *sie* and are greased with pig's fat (*loc. cit.*, 1894-95, p. 45).

The Somlos, who live about 10 or 11 miles to the north-west from Masingara, drink the *Piper methysticum*, but do not chew lime and betel-nut (Macgregor, *Annual Report*, 1895-96, p. 41).

T. Reeves Palmer has just informed me that the Dirimu, who live on the Kuniubaduga, or eastern affluent of the Binaturi, have an annual ceremony called *Bromo giri*, or Pig dance, at which wooden human effigies, *udo*, are paraded; the men carry on their backs male *udo* and the women female *udo*. He adds, "*gomoda* is drunk at this ceremony, and to some extent on other occasions as well, but only by fully grown men and women past the age of child-bearing. It is chewed by men only. The chewed root and saliva are spat into a piece of *choblabe*, the leaf sheath of the coco-nut palm, and then squeezed into half a coco-nut shell; the process is repeated several times." He understands that the fear of attack by neighbouring tribes is the reason why *gomoda* is not indulged in more freely. The young men of the village are sent out to keep watch and protect the village, as the *gomoda* incapacitates the drinkers for a time; thus the practice was well under control.

H. P. Beach informed me in September 1914 that the bushmen (by which he meant the people inland from the coast of Daudai) are "bowled over" if they take more than two mouthfulls of *irka* (*gamada*); they never cut the head of a pig without drinking *irka*.

T. F. Bevan gives a lurid account of head-hunting and cannibalism in Kiwai when he visited it in December 1887; he says: "At these cannibal feasts a kind of kava is drunk. This is prepared from an indigenous root chewed by virgins of about thirteen years of age. While it does not exactly intoxicate, its effect is not unlike that of opium" (*Toil, Travel, and Discovery in British New Guinea*, 1890, p. 258). Macgregor investigated the matter on the spot in November 1889; the natives described Bevan's account as "bitter language" and "not true." There is no evidence of cannibalism. "There is not a kava plant in or belonging to the village [Iasa]. It is used on the mainland but it is a curiosity at Kiwai, and as such I have heard of one plant at Sumai. The people of this island do know how to use it, but they say it is never chewed by women" (*Annual Report*, 1889-90, p. 38).

J. Chalmers says that the natives of Kiwai use *gamada*. "When a feast is to take place the young men chew the root and collect their saliva into wooden bowls, and water is added. On the day of the feast only those who have passed through all the stages of initiation may drink it. Large quantities of it are drunk. The root of the Fly River kava is much smaller than that of the South Seas" (*Journ. Anthr. Inst.*, xxxiii, 1903, p. 121). As Chalmers resided as a missionary

for some time on Kiwai we may accept his statements rather than those of casual visitors. H. P. Beach informed me that *gamada* is drunk in the estuary of the Fly, but not by those in the estuary of the Bamu. The Wabuda people have learnt its use within the last four or five years. He also stated that there were large gardens of *gamada* on the upper reaches of the Fly River.

Kabiri (Lyons), or Girara (Beaver), is the low-lying district between the Fly River and the Aramia affluent of the Bamu; roughly speaking, it extends from about 142° 30' to 143° 15' E. long. In a letter dated October 1910, and privately published in 1911, the Rev. B. T. Butcher describes the first journey ever made through this country by a European; in it he was accompanied by G. Landtman. He spent a night in the house at Barima, and when he tried to go to sleep he was disturbed by a strange, weird kind of singing. He found all the men seated in a circle in the central hall round their chief, who was beating time with a lighted *wiki* (a little stick which burns slowly). Each man had his betel-nut and gourd by his side and a lighted *wiki* in his hand, with which he beat time in unison with the chief while joining in the chant. Boys were all the time chewing *gamada* for the men's use.

Most of the information from Astrolabe Bay has been obtained at the Papuan-speaking villages of Bogadjim and Bongu, all the other coast villages are Melanesian-speaking. Miklucho-Maclay does not, however, say precisely where he saw kava employed. Finsch says it was in Constantine harbour, which is in the neighbourhood of Bongu, on the southern shore of the bay. The corpse is exposed on a framework before burial in Bogadjim. The dead help their relatives, and are invoked on all sorts of occasions; great wooden images, apparently of especially honoured dead, are made in Bongu, and are widely exported. Every few years a feast is held in their honour, which women may not share [kava, doubtless, is drunk at this]; if the image fails to help suppliants, it may be set aside. The existence of totemism is doubtful. The *asa* or *ai* cult centres in a poor sort of house in the jungle which contains wooden masks, the ritual musical instruments, *asa* flutes, etc. Nothing is known about the initiation ceremonies which take place about every ten or fifteen years, but Biro states that they are just the same as the *balum* at Finschharbour; circumcision then takes place and bull-roarers are used. Biro states that the *asa* house (which women may not approach) was formerly the only place for practising ancestor cult, initiation ceremonies of youths, and the sacred dances, but latterly, though not from European influence, *asa* houses are more or less neglected, being replaced by the men's house (B. Hagen, *Unter den Papuas in Deutsch Neu Guinea*, 1899; W. Semayer, "Beschr. Cat. L. Biro," *Eth. Sam. Ung. Nat. Mus.*, III, 1901). Miklucho-Maclay says that on the Maclay coast (from Astrolabe Bay to C. König Wilhelm) the corpse is placed in a sitting position with knees so bent as to touch the chin and with the arms clasping the legs; it is wrapped in leaf sheaths of the sago palm, bound with lianas, left for some time in own hut, and later buried there. A year later the head at any rate is dug up, the lower jaw cleaned and treasured, but the skull is thrown away in the bush and may be cheerfully exchanged for trade goods. (*Z. f. Eth.* V, 1873, p. 188, and *cf. Nature*, XXVII, 1882, p. 137.) We are not told definitely that these people drink kava.

The Melanesian-speaking Jabim about Finsch harbour and Cape Cretin have a great periodic circumcision feast termed *balum*; the lads to be initiated are conducted to a specially-built hut which represents the *balum* monster, the entrance being its open mouth; the whole ceremony is accompanied by the booming of bull-roarers, *balum li*, and the noise of sacred flutes. The *balum* cult combines the initiation of the youth into the society of adult men with the recognition of his

kinship with the dead, his death to the old order and new birth into a higher social status being symbolised by his being swallowed by a monster who is the ancestor of the village kin. The dead are buried, but respected persons may be mummified, and the skull and some bones may be kept for some time. Every dead Jabim man of repute has a bull-roarer buried with him. Ghosts are not solely harmful, but may help the living. There are traces of totemism (A. C. Haddon, "New Guinea," *Encyclopædia of Religion and Ethics*, IX, 1916).

The Tugeri are cannibals and inveterate head-hunters. All the men sleep in a few men's houses at each end of a village, and there is a bachelors' clubhouse outside the village. There is a complicated patrilineal exogamous totemic system, in which plants are combined with animals into main and subsidiary groups. The inhabitants of several villages assemble at initiation, bull-roarers are employed, and there are many dances, in which masks are worn and animals represented. The bull-roarer is anthropomorphized as Sosom, a mythical monster in the bush, who at the annual festival at the beginning of the south-east season devours the novices but brings them back to life; the bull-roarer is not known anywhere else in Netherlands New Guinea. The youths receive a new name but are not circumcised (R. Pösch, *Sitz. K. Akad. Wiss. Wien*, CXV., 1906, p. 899; *Z. f. Eth.*, 1907, p. 392; *Geographical Journal*, XXX, 1907, p. 616); the system of age grades is described by H. Nollen, *Anthropos*, IV, 1909, p. 553. From cultural evidence, I think it is highly probable that the Tugeri migrated from the interior down the Strickland River, across the Fly, and down the Merauke and other rivers to the south coast.

In British New Guinea kava is drunk by Papuan-speaking peoples belonging to three distinct cultures:

(1) We know very little about the Kabiri, but, as I shall show in my forthcoming paper in the *Journal*, they have a decorative art that is unlike any hitherto described. The villages usually consist of a single house of immense size (A. P. Lyons, *Annual Report*, 1913-14, p. 100). The people emphatically deny being cannibals, but admit head-hunting, and have five patrilineal totems (W. N. Beaver, quoted by J. H. P. Murray, *Annual Report*, 1911-12, p. 11). At their principal ceremony, *moi-iata*, three large named wooden effigies of crocodiles are exhibited and masks worn, marriages are celebrated, and youths initiated. The boy to be initiated is previously hidden, and at the ceremony is placed in the large jaws of one of the crocodiles. Considerable attention is paid to human heads, and there probably is a manes cult. Human effigies are made, and they employ elaborate paraphernalia in their ceremonies. I should not be surprised if these people, like the Naman and Elema tribes of the Papuan Gulf, have traditions of coming from the interior of New Guinea. We know nothing of their language.

(2) The Mawata people emigrated to the mouth of the Binaturi from Kiwai about a hundred years ago. There seems to be some reason to doubt whether the Kiwai people and other islanders of the Fly estuary were originally kava drinkers, and the Mawata folk may very well have learnt the custom from the Masingara. No evidence has been published to show when the Kiwai people arrived in the Fly estuary; indeed, they claim to be aborigines. They were head-hunters, but apparently not cannibals. They have elaborate initiation ceremonies, at which bull-roarers, masks, and human effigies are employed; they are also intimately associated with ensuring the fertility of garden produce. The dead are buried. They speak a "Papuan" language. (Beardmore and others, *Journ. Anthr. Inst.*, XIX, 1890, pp. 459-73; B. A. Hely and J. B. Cameron, *Annual Report British New Guinea*, 1892-93, pp. 57, 67ff; Hely, 1895-96, p. 69, 1897-98, p. 134; A. C. Haddon, *Head-hunters, Black, White, and Brown*, 1901, Chapter VII; *Report Cambridge Expedition to Torres Straits*, V, 1904, p. 187; J. Chalmers, *Journ. Anthr. Inst.*, XXXIII, 1903,

p. 117; C. G. Seligman in J. G. Frazer's *Totemism and Exogamy*, II, 1910, pp. 29, 35; G. Landtman, *Festschrift till. Edvard Westermarck*, Helsingfors, 1912, p. 59; *Folk-Lore*, XXIV, 1913, p. 284.)

(3) Little is known about the Masingara, or Masingle, as they call themselves. They are a typical bush tribe. Seligman says the people are not totemic, but there are two exogamous divisions; descent is patrilineal (MS.). The cult of the crocodile has already been alluded to; the memory of Nugu is also perpetuated in the figure of a man which is kept in the chief's house (B. A. Hely, *Annual Report*, 1894-95, p. 45). The property laws have been recorded by Hely; women, whether married or not, can own land by inheritance or cultivation (*Annual Report*, 1893-94, p. 54; cf. also D'Albertis' *New Guinea*, II, pp. 172-75, 181, 187, 188); G. Landtman has studied these people, but his results have not yet been published. The neighbouring Somlos are doubtless allied to the Masingara; they bury their dead. The Dirimu speak the same language as that of the Masingara and numerous other villages in the district, all of whom are doubtless of the same stock. They are patrilineal, daughters inherit land only when there are no sons. The large kangaroo, *cheba*, is regarded as the common mother of all the bush peoples of the district, therefore it is tabued to them as food (T. Reeves Palmer, MS.). There is no evidence that these bush tribes were ever head-hunters or that they have a rich ceremonial social life; they speak "Papuan" languages.

The custom of drinking kava might readily spread from the Kabiri to the bush peoples behind the right bank of the delta of the Fly without markedly affecting the great islands in the estuary, but we are entirely in the dark as to the date of this possible drift. There is no evidence to lead one to suppose that this system was imported into the Fly estuary area, or to the south coast of Netherlands New Guinea, by a migration or cultural drift by sea. My own opinion is that it has come overland; possibly its point of departure was Astrolabe Bay. It is, however, futile to speculate further until we have information concerning the peoples in the interior of New Guinea.

A. C. HADDON.

DESCRIPTION OF FIGURES IN PLATE K-i.

KAVA ROOT AND BOWLS FROM KIWAI ISLAND, ESTUARY OF THE FLY RIVER, BRITISH NEW GUINEA, FROM SPECIMENS PRESENTED BY DR. G. LANDTMAN TO THE ETHNOLOGICAL MUSEUM, CAMBRIDGE.

A.—Bowl of coco-nut shell, *nuku*, diam. 8.5 cm., height 5 cm., with a zigzag engraved round the outer margin of the rim.

B.—Plain *nuku*, diam. 7 cm., height 44 mm.

C.—*Gamadu* root, the thick portion of the dried root is 7 mm. in diam.

D.—Leaf sheath of a palm through which the beverage is filtered.

Africa: Nile Valley.

Seligman.

Dinka Arrows. By Professor Seligman, M.D.

88

The majority of the Dinka tribes do not use the bow and arrow; indeed, the only exception that I know of is the Agar Dinka, though it is likely enough that some of their neighbours may share their peculiarity. The breaking down of tribal isolation which has advanced so rapidly of late years seems to make it worth while to figure a number of Agar Dinka arrows given me a few years ago by the Rev. A. Shaw, C.M.S., who himself collected them from the Dinka (*see* Plate K—ii). The shafts are usually from about 50 cm. to 70 cm. in length, the iron heads approaching 15 cm. I cannot say whether the Agar actually made the arrows figured or procured them from another tribe; in form the heads resemble those in use among the Bongo, the Mittu, and their congeners, from whom the use of the bow may have been learnt.

C. G. SELIGMAN.

Obituary.

Brabrook.

Sir Richard Martin.**89**

By the death, on 23rd August, of Sir Richard Biddulph Martin, Bart., M.A., the Royal Anthropological Institute has lost one of its earliest and most constant supporters. Born 12th May 1838, the eldest son of an eminent London banker, he succeeded in due course to be the chief partner in Martin's Bank, the oldest in London, and then one of the leading private banks—since converted into a corporation under his direction as chairman. Its antiquity is still testified by the sign of a grasshopper and by a blunderbuss, which both adorn the fireplace of the new building of the bank, as they formerly did the less stately building which has given place to it. Mr. Richard Martin did not allow the business concerns of the bank, or the numerous City organisations which sought his influence and his help, to engross all his interest. He gave much of his time and attention to the work of scientific societies, and he was always ready to respond to claims on his philanthropy. He joined the Royal Statistical Society in 1872, was elected its Treasurer in 1875, and President in 1906. On that occasion he delivered a valuable presidential address on the Statistics of Parliamentary Elections. On the formation, in 1896, of the Childhood Society, for the scientific study of the mental and physical conditions of children, he accepted the office of treasurer, and after that body had been converted into the Child Study Society, London, he became President, a position which he held until his death. He took an active part in several congresses dealing with subjects of education and public health. In his later years, though suffering from severe lameness, he maintained a regular attendance at the councils to which he belonged.

He joined the Ethnological Society in 1868, and accordingly ranks in our Institute as a member of 48 years' standing. He became in 1877, and has since continued, a member of the council, and was on several occasions one of the elected vice-Presidents. He visited Smyrna on the 20th May 1876, and collected a number of objects from a refuse heap on Mount Pagus, the castle hill there, which he exhibited to us in the following May. The then President (General Pitt-Rivers) and Sir John Evans attributed them to the Roman period. Again, at the meeting on the 13th January 1891, he exhibited and commented on a fire syringe from North Borneo, a portion of the Empire in the development of which he was interested. His position and experience added weight in our councils to the advice which his sympathy with all the activities of our Institute inspired.

He was Member of Parliament for Tewkesbury, where was his country home, Overbury Court, and was created a baronet in 1906. He leaves no heir to succeed to the title.

E. BRABROOK.

Malabar.**Rajah.****Kingship in Ancient Malabar, with special Reference to Cochin.****90***By K. R. V. Rajah.*

In my *Comparative Studies in Cochin History* (reviewed in MAN, 1915, 28) I have mentioned some features common to the royal and divine authorities and institutions here, on the Malabar coast, such as common appellations, fortifications, use of flags, conches, and other paraphernalia and emblems, in support of my conjecture of the divine origin of kingship, to which are to be added some more of no less importance. The first is that the inspired prophet of God or of the temple, who is postulated there to be the source of royal authority and prerogative, is still known by the name *Kōmaram**—a word derived by Dr. Gundert from *Kōmān* (= priest

* The word *Kōmaram* seems to have its correlative in the word *Edamaram* or *Idamarom*, formed of *Edam* or *Idam* (= mansion or jurisdiction of a vassal), which is also found in compound words *Edaprabhu* or *Idaprabhu*; *Edavazhi* or *Idavazhi* (= vassals or feudal chiefs).

or headman), which again is formed of *Kō* and *mān* or S. *Gōmān*, and is said to mean "King." Dr. Gundert's etymology does not seem to have been established beyond dispute. The base or root *Kō* is also met with in words *Koil*, *Kovil*, or *Koyil*, and their derivatives, explained in my *Studies* (pages 47 and 48) as referring to the divine as well as to the royal residences and institutions. The most probable or correct etymology, therefore, seems to be that all the words above mentioned are cognates. This seems to show that the inspired prophet was regarded as the king as well as the priest, and performed both functions and exercised both powers.

The second point is that when a divine procession passes along any route, the householders of the route receive it at their gates with lighted lamps and offer measures of paddy, rice, &c., to the deity in procession. The same honour or homage is done to a royal procession also. This is called *Paravaippu*.

Abnormalities, rarities of the season, or freaks of nature, such as fruits, &c., are either offered to the deity or to the king. They are even regarded as their legitimate dues.

These temples and their premises seem to me to have been the centres, not only of worship, but also of other early tribal activities as well. It was here that the king was first anointed, and the tribal assembly (*Kuttam*, page 45) periodically met to discuss and settle the communal affairs. It was here that the crimes and civil disputes were adjudicated by oaths and ordeals. It was here that periodical festivals and fairs were held, out of which, in course of time, grew commercial exchange. Further, it seems to me that the *tali*-tying marriage of the girls in the temple and before the portals of the divine sanctuary was the early form of this sacrament among the indigenous peoples of South India, which is still current in Malabar without abuse, especially among the poorer classes, but which, being misunderstood and misinterpreted elsewhere as dedication to God or to the temple, for services, seems to have given rise to the Devadasi class and its profession, the nautch, both of which are now held in contempt everywhere. K. R. V. RAJAH.

British Honduras: Archæology.

St. George Gray.

On a Chipped Flint Implement found in British Honduras.

By H. St. George Gray.

91

The remarkable implement here figured was found some years ago at a place called "Seven Hills," in the southern part of British Honduras. It is the property of Mr. H. P. C. Strange, Commissioner at Corozál, and has been deposited in the Museum of the Somersetshire Archæological Society at Taunton Castle.

From its size and design it appears probable that it was a ceremonial implement, or emblem of office. It consists of flint, and is $19\frac{3}{4}$ inches in length. It is chipped all over its surfaces and worked along every edge; the "handle-end" is of triangular cross-section, tapering gradually throughout its length towards the butt. The projecting top, of bi-convex section, also tapers; the summit is slightly broken. Along one side the margin of the implement expands for a length of 5 inches, and takes the form of an almost straight, chopper-like edge. On the opposite side are two tapering projections, $2\frac{1}{2}$ inches long (one broken at the point); they form an almost crescentic outline. The object weighs about 33 oz. (avoirdupois).

Mr. Strange states that a similar implement, but slightly longer, and found in the same locality, is (or was) in private hands in Belize.

In general character this implement closely resembles other large and sometimes serrated implements which have been found in Honduras. E. T. Stevens figures six such objects in *Flint Chips* (1870), Frontispiece, and pp. 289-291. His figures, Nos. 5, 6, and 7, were also given in the *Archæological Journal*, IX (1852), p. 97. (See also VIII, 422.) One is an implement with five serrations on one side and

six on the other, pointed at both ends; length $16\frac{1}{2}$ inches, width 4 inches. Another, measuring 17 by 13 inches, is in the form of a crescent having six projecting points, with a much longer central one having five teeth along each margin.* The third, now 12 inches long, is of similar form to the last, but broken. They were added to the Blackmore Museum, Salisbury, with other objects forming the Brackstone Collection, in 1867.† In 1868, the same Museum obtained three other specimens, less striking.‡ They consist of a large spear-head in process of manufacture, a saw-like object, and portion of a dentated disc, rudely worked.§

A chipped flint object of fine workmanship from Honduras was exhibited by Colonel A. Lane-Fox at the Society of Antiquaries in 1871, and is figured.|| It is in the form of a crescent and worked on every edge (length 6 inches). It is now in the Pitt-Rivers Museum at Farnham, North Dorset.

Twenty-four comparatively small implements of chert and obsidian of peculiar form, found in British Honduras, are figured by Dr. T. Gann.¶

Mr. R. Garraway Rice exhibited in 1909 a curious flint figure chipped into human form (height 9 inches), said to have been found in Thames ballast, but which probably came originally from Honduras.** There is a cast of a similar figure in



CHIPPED FLINT FROM HONDURAS.

the British Museum (Franks Collection). A few other similar implements are also exhibited in the national collection. Another stone implement having serrations, labelled "El Cayo, British Honduras," may be seen in the Bristol Museum.

H. ST. GEORGE GRAY.

Archæology.

Moir.

The Flaking of Sub-Crag Flints. By J. Reid Moir.

92

In the *Journal of the Royal Anthropological Institute* (Vol. XLIV, 1914), Mr. Hazzledine Warren has published a paper ("The Experimental Investigation of Flint Fracture and its Application to Problems of Human Implements," pp. 412-50), in which he has once more attempted to show that what he terms

* Mr. R. Temple, Chief Justice of Honduras, exhibited in 1857 some remains from tumuli in Central America, including a flint collar or torque. (*Journ. Brit. Arch. Assoc.*, XIII, 319.)

† The accounts of Dr. Daniel Wilson (*Prehistoric Man*, I, 214-5, Figs. 7, 8), and Mr. R. H. Brackstone (*Arch. Journ.*, VIII, 422; and IX, 97), do not agree in some details in regard to the discovery of these implements. One of the specimens, in outline somewhat resembling a dog, is in the British Museum.

‡ These implements changed hands once or twice. (*Quar. Journ. Suffolk Inst.*, Jan. 1869, p. 8.)

§ These implements are figured in *Flint Chips*, Frontispiece, Nos. 8, 9, 10.

|| *Proc. Soc. Antiq. Lond.*, 2 ser., V, 93-95.

¶ *Ibid.*, XV, 430-4. They were acquired by the British Museum in 1897.

** *Ibid.*, XXII, 360.

"eoliths" have been produced by natural forces. I propose to offer some criticisms on his paper, but will confine my remarks to his views upon the sub-crag flints, with which I feel myself to be in some measure familiar.

I notice on p. 429, in dealing with the sub-crag flints, Mr. Warren states: "In considering the effects of crushing on a larger scale, and under greater pressure, one is confronted with serious practical difficulties. It is not possible to work experimentally under pressures which are comparable with those that obtain beneath an ice-sheet. . . ." And again, on p. 449: "That the larger chipping of the sub-crag flints has not been reproduced by experimental methods. . . ." These two definite statements show clearly that, in Mr. Warren's opinion, it has not yet been possible to imitate the sub-crag flaking by experimental means, and as this is so, it is obvious he cannot possibly know how this particular flaking was produced, whether by man or by nature. Yet on p. 431 Mr. Warren states that he holds the "unequivocal"—that is, "not doubtful"—opinion that some natural force has effected the chipping.

This illogical attitude on Mr. Warren's part is somewhat remarkable, and appears to be at variance with the view expressed on p. 449 as to his anxiety to have the fact of the existence of Pliocene man as firmly established as is that of his Palaeolithic successor. It is not necessary to invoke the crushing power of an ice-sheet to produce flaking upon flints comparable in size with that to be seen upon the sub-crag specimens. I have seen and handled flints fractured in a press which showed flakes removed quite as large as those detached from the sub-crag nodules, and moreover no immense pressure was needed to remove them. Flint of even the best quality and greatest hardness will stand only a limited amount of pressure before fracturing, and the pressures "that obtain beneath an ice-sheet" would undoubtedly reduce it to powder. It is, therefore, quite needless to invoke such a mighty force to account for the flaking of the sub-crag flints. One can break large, sound flint nodules in a press and produce fractures as large as those exhibited on the sub-crag flints, but everyone familiar with the differences known to exist between the fractured surfaces of flints broken by pressure and by percussion will see that the fractures produced in the press differ from those of the sub-crag specimens. If, however, a large sound nodule of flint is placed on the knee and struck in a certain way with another stone of heavy weight held in the hand as a hammer-stone, fractures are produced which are indistinguishable from those upon many of the stones from below the Red Crag. This latter style of workmanship is known as "human flaking," and in the case of the sub-crag flints affords evidence of the existence of Pliocene man.

On p. 430 of his paper Mr. Warren states that "many eoliths of Kentish type occur in the basement bed of the crag, and that the rostro-carinate type is closely associated with the familiar notches-with-point." I do not know what portion of the sub-crag basement bed Mr. Warren has been examining, but I do know that what he states is incorrect regarding the bed found below the Suffolk Red Crag, and that the flints illustrated on Plate XL (Nos. 4 to 10), to which the reader is referred, and which are said "to speak for themselves," bear no resemblance to the vast majority of the sub-crag flints examined by me.

Mr. Warren makes use (on p. 430) of the old argument as to the inutility of the sub-crag implements, and bases his view upon the comparatively few specimens housed in the British Museum, Bloomsbury. This argument of "inutility" was at one time used against the "humanity" of the now universally accepted palæoliths. Is Mr. Warren prepared to state definitely to what use the early Challeen implements were put, or to explain the meaning of the twisted ovates of the later St. Acheul period? If Mr. Warren had visited the museum at Ipswich before reading his

paper he would not, I think, have dwelt upon the "uselessness" of the sub-crag implements, because he would have seen there a series of normal scrapers and borers such as are met with in every prehistoric culture, and whose utility cannot be denied.

Mr. Warren states (p. 430) that the rostro-carinates "are admirable examples" of chipping along the A and B planes of least resistance, while the technical "character of the chipping is also in agreement with that observed in the operation" of mechanical pressure." Every flint implement has naturally been flaked by man along the lines of least resistance, the discovery of the advisability of so flaking flint was probably one of the first achievements of the dawning human brain, and if the rostro-carinates exhibit such flaking it is just what would be expected by all those who regard them as humanly fashioned. But the character of the flaking upon these specimens bears no resemblance to flaking produced by pressure. There are, apparently, a "certain number" of the sub-crag flints which are "more suggestive of control," and these are perhaps "the sporadic products of violent concussion rather than the effects of pressure" (p. 430). That is to say that the vast majority of the sub-crag flints were fractured by pressure, but certain other recalcitrant specimens were selected by nature for subjection to the effects of "violent concussion."

About the year 1875 there lived, I believe, in London a certain number of gentlemen who were strongly opposed to the growing belief in the "humanity" of the then newly-discovered palæoliths, and who very frequently spoke and read papers before the Victoria Institute. These investigators, I find, were unable to accept these flints as being humanly-flaked because of (1) their "uselessness"; (2) their abundance in river gravels; (3) the fact that flint "has a natural cleavage, which gives to it a tendency, however struck or crushed, to break into these particular forms"; (4) their opinion that these flints, "whether crushed by glaciers, or in any other way unknown" to us, the mere breaking of flint is not a difficulty that has to be met"; and (5) of the finding by one of their number that "Blake's patent stone-breaker, in which a cast-iron jaw is worked by a steam engine," could produce flints which could not be well distinguished from "the reputed knives and scrapers of palæolithic man."*

There is, as will be noticed, a very marked resemblance between the above-mentioned views on the palæolithic flints and those now held by Mr. Hazzledine Warren on the pre-palæolithic specimens, and as the former are now discredited and forgotten, so, in my opinion, will Mr. Warren's disappear. The issue between us is fortunately very clear and defined. I hold that these sub-crag flints are humanly-fashioned, and in support of this opinion I can show flints of precisely similar forms and exhibiting flaking showing the same characteristics, which I have produced by flaking flints with a hammer-stone in the ordinary human manner. Mr. Warren believes that natural forces have flaked the sub-crag specimens, and therefore, if he wishes to bring forward sound, incontrovertible evidence in support of his views he must show a series of flints flaked by some unguided force which will also be of precisely similar forms and the flaking of which will exhibit the same characteristics as are to be seen upon the sub-crag specimens. It is idle to enter the realm of speculation, and to try to imagine what natural forces may or may not have done to flints in the remote past. Actual facts are what is needed, and all else is "vanity and vexation of spirit."

J. REID MOIR.

* Callard and others, *The Antiquity of Man*, Elliot Stock, 62, Paternoster Row, E.C.

Anthropology.

Wright.

The Endocranial Cast of the Piltdown Skull. By William Wright.

93

In the last number of MAN, Professor Elliot Smith prefers a charge of inaccuracy against the present writer, but does not stay to establish it except for the statement that "Professor Symington has not discussed the mode of reconstruction." It is quite true that Professor Symington has not discussed the mode of reconstruction of the skull, nor was it stated that he had, but he has criticised the mode of reconstructing the brain by taking a cast of the interior of the cranium, and with such effect that we notice Professor Elliot Smith has now discarded the term brain-cast, and writes of cranial-cast, whereas formerly he used the two terms in a manner which seemed to imply that they were synonymous.

Professor Symington has further shown that even when an endocranial cast is taken under the most favourable conditions, such a cast can only convey a general idea of the external appearance of the brain. When, however, the cranium is fragmentary, and its reconstruction admittedly faulty, most of us, we imagine, will not be disposed to attach much importance to "the obviously expanding area" at the posterior end of the second temporal convolution as it can be recognised on an endocranial cast; the more so as a considerable portion of the cranium in this region is wanting, and, further, the region is one where skulls under pressure have a marked tendency to burst.

WILLIAM WRIGHT.

REVIEWS.

Anthropology.

Evans.

Black and White in the Southern States. By Maurice S. Evans, C.M.G.,
London: Longmans, Green and Co., pp. 299. 1 map. Price 7s. 6d.

94

Every anthropologist hopes that the day may come when his text books may equal, in their certainty and in their results, the celebrated treatise written by Euclid some 300 B.C. Many of our speculations are purely theoretical, but in their ultimate result they must be applicable to the masses of humanity now jostling each other in the fairer lands of the earth. Of all the factors elicited by race-contact none rivals in its interest and in its importance that manifestation of the mind of man known as race instinct, race prejudice or race hatred. In England, if we confine our experience to the homeland, our knowledge must be purely theoretical. If we want to study the problem we can find it alive and in active operation in two regions or the earth—South Africa and the Southern States of America. The problem in these two regions differs in this respect: The white man transplanted the negro to the States; black and white have to live cheek by jowl year in and year out. In South Africa the white man has come into a black man's country; and for the greater part the native is still segregated in his home country—in Basutoland, in Bechuanaland, in Swaziland, the Transkei, and locations in Zululand and Natal. The conditions in the Southern States make the race problem there a much more acute one than in South Africa.

The author of the book under review approaches the problem of race prejudice from the point of view of a very practical anthropologist. He has to solve certain problems which are now pressing for a solution in South Africa. He has to determine the lines on which the education of the native races is to be carried out. Some years ago he wrote a very excellent book—*Black and White in South Africa*—a very able study of the racial problems with which the statesmen of South Africa have to deal.

In the present work he gives us the results of a personal investigation of the racial problems of the Southern States, and we do not exaggerate when we say that he has written one of the most helpful and scientific of the many books which

have been written round the ever-present "black and white" problem. South Africa has been fortunate in finding a sane, sound, and scientific counsellor to help her in solving one of the most difficult questions that a State can have to face.

Mr. Evans lays hold of the true nature of "race prejudice"; to him, as to all anthropologists who have given their attention to the matter, it is akin to the instinct that binds together the individuals of any species of animals; it is a basal factor in the evolution of human races—which we are justified in supposing to be incipient species. He wisely and rightly discards the use of "superior" and "inferior" as terms applicable to races; they are different, and we must recognise the exact nature of those differences if we would discover a working arrangement which will permit the two races to live side by side to their mutual advantage. For the full enjoyment of a primitive form of life, the black man is the white man's superior; but when we apply as a test that form of industrial life which has been evolved in Europe, there is no question of equality of fitness; in every place and at every time the white man proves his dominance.

Mr. Evans patiently examines the possibility of solving the black-white problem by a fusion of races. He believes that the race prejudice of the white race offers an impassable barrier, a barrier so strongly set as to be finally and permanently indestructible. The problem cannot be solved by miscegenation.

Complete segregation of the races being regarded as impracticable and economically unwise, and the award of absolute equality of rights to the black man in a mixed community having been found to be impossible in actual practice, what is to be done? The solution Mr. Evans offers is this: Frankly recognise the differences in the aptitudes and capacities of the two races, and train the members of each race for that particular department of the economy of civilisation for which it is best fitted. Give the white race the form of government which secures its ideal civilisation, and with sympathy and justice give the coloured race an intercurrent measure of self-government—in a form acceptable to the leaders of the coloured race. He advocates territorial separation, as far as is possible, and the elimination of all conditions which bring about an industrial competition between the individuals of the two races. For the peace of mind of our statesmen, one could wish that Nature had evolved a more uniform type of humanity, but seeing that these differences are real and that recent centuries have brought together the diverse products of time and place, and that a mutual accommodation has to be sought for and found, we see no better way out of present difficulties than that propounded by Mr. Evans. As a matter of practical politics, the scheme presents many perplexities in its application, but the alternatives to that scheme—miscegenation, slavery, race-extirpation—are unthinkable.

A. KEITH.

Archæology.

Droop.

Archæological Excavations. By J. P. Droop, M.A., late Student of the British School at Athens. Cambridge Archæological and Ethnological Series. Cambridge: University Press. 1915.

95

It is, unfortunately, too often the case that excavations, even in the hands of those who should know better, degenerate into mere treasure-hunting, whereby the scientific world gains little, while the site is irretrievably spoiled. As a protest against such barbarism and a warning to would-be diggers this little book is invaluable, and its list of offences to be avoided is well-nigh exhaustive.

Its aims are not, however, negative only, but it abounds in useful hints of a positive kind. The inexperienced explorer would do well to consult its pages before

preparing an expedition, but it may be doubted whether his results would be wholly successful if they depended solely upon the information gained from reading them. As an introduction to the subject it is admirable, as a text-book on the whole art of digging, like all text-books, it necessarily fails, for such arts cannot be learnt entirely from books alone. In saying this I do not wish to disparage Mr. Droop's monograph, but to warn the intending excavator that more is needed than the study of this work.

Mr. Droop reminds his readers that the qualifications of an ideal excavator are numerous, among them being those of civil engineer and surveyor. To assist them in the last province he has added an appendix on the use of the Dumpy Level, which will, however, scarcely serve to convert a novice into an expert.

One is glad to find Mr. Droop reiterating the advice that nothing should be neglected because it is not what the excavator is looking for, and suggesting that the explorer should know how to take those measurements of bones and skulls that are desired by anthropologists. These points, more particularly the latter, have been too much neglected in the past, especially in Greece, including one expedition in which Mr. Droop, I believe, took part.

H. J. E. P.

Australia.

Masson.

An Untamed Territory: The Northern Territory of Australia. By Elsie R. Masson. 33 Illustrations and 2 Maps. Pp. 181. Macmillan and Co., London. 1915. Price 6s. net. **96**

After many years of silence from this portion of the great island continent, we have lately been favoured with two works full of information—Professor Baldwin Spencer's *Natives of the Northern Territory of Australia* (Reviewed MAN, 1915, 35), and now Mrs. Masson has added to our knowledge by giving us a book describing a woman's life in Darwin (*sic*). Why should the older name of Port Darwin disappear? It is still to be found in all maps, even those produced in her own book. Palmerston, the original name of the settlement, seems to have entirely dropped out of use.

Mrs. Masson, in her Introduction, gives a concise epitome of the history of this portion of Australia up to the present time. To show how up-to-date her description is, she devotes Chapter III to "The Servant Question," but perhaps fearing she is making the Settlement appear too civilised, follows with an account of a Corrobboree. The writer of this Review in reading this latter seems to see Port Darwin much the same as when he was there thirty-four years ago—civilisation and savage life arm-in-arm, for after dinner at the Residency an adjournment was made into the bush to witness a large gathering of natives, who were performing a Corrobboree. However, the real change comes when in Chapter VI we read of a train to Pine Creek Gold Diggings, and a motor-car journey to an outlying station.

The earlier settlements at Port Essington and on Bathurst Island are fully described. The blackfellow is not forgotten, and it would appear that, with the parental care of settler and Government, there may be some hope of his ultimate preservation.

That there is a great future for the northern territory there can be little doubt. The overland telegraph starts from Port Darwin, and the railway, which is to join it with Adelaide, will, no doubt, be continued in the not far distant future.

The book is illustrated from excellent photographs by Professor Baldwin Spencer and Dr. Mervyn Holmes of Port Darwin.

A full bibliography of the northern territory, compiled by T. Gill, is given in *In Northern Seas*, by A. Searcy, Adelaide, 1905. J. EDGE-PARTINGTON.



FIG. 1.



FIG. 2.

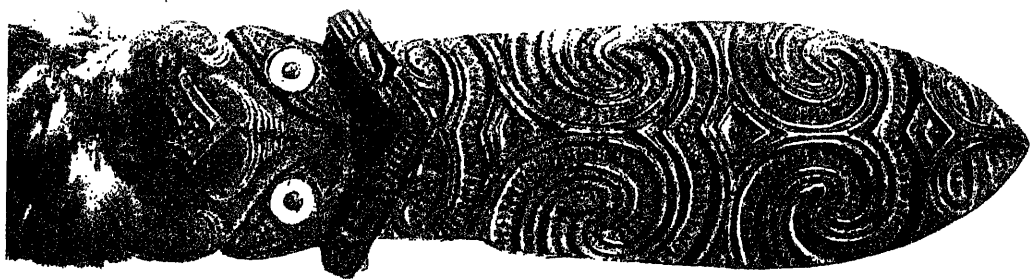


FIG. 4.
DETAIL CARVING OF FIG. 1.

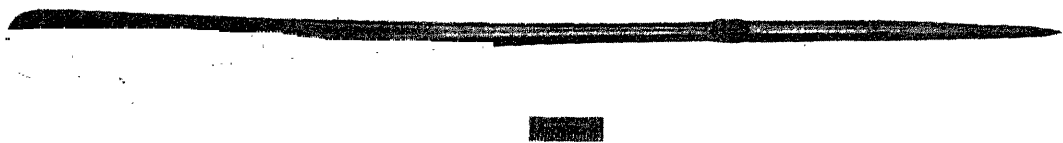


FIG. 3.

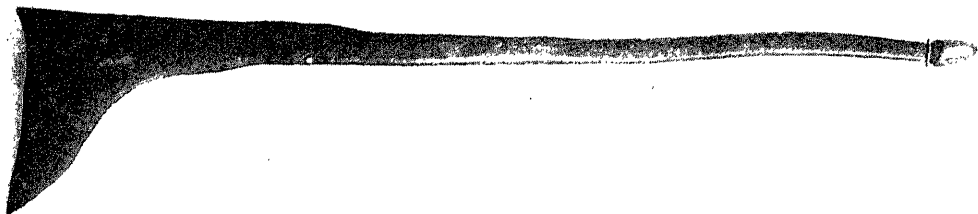


FIG. 15.

MAORI WEAPONS (HANI, TEWHA-TEWHA, AND POU-WHENUA).

ORIGINAL ARTICLES.

With Plate L.

New Zealand: Ethnography.

Skinner.

Origin and Relationship of Hani, Tewha-Tewha, and Pou-Whenua. By H. D. Skinner.

97

Figs. 1, 2, and 3 of Plate L represent three characteristic kinds of Maori weapon. Fig. 1 represents a hani, or as it is called in Taranaki, a taiaha. It is 72 inches long, and the greatest width of the blade is $3\frac{1}{2}$ inches. In actual fighting the hani is grasped by both hands just above the carved end, which is pointed downwards. The blow is delivered with either of the edges of the blade, both being sharp. The hani is generally, though quite wrongly, called a spear. It is sometimes less incorrectly described as a two-handed sword. As will be seen from the facts adduced below, hani, tewha-tewha, and pou-whenua are all light, elongated clubs having a sharp striking edge or edges and also a point used for in-fighting.

In Fig. 1 the carving at the lower end has been boldly designed and finely executed with stone tools. The point (Fig. 4) represents a human tongue ornamented with scrolls. Above it are the teeth and upper lip, above which may be discerned a diminutive nose, eyes obliquely set and inlaid with circlelets of shell, and a beetling brow with conventional forelock. Above the carving is a band, some 6 inches wide, of scarlet kaka feathers, surmounted by a circlelet of cream-coloured dogs' hair. This hair has been cut from the tails of native dogs and tied in little tassels with binding of dressed flax. The flax tags of these tassels are then woven into a cord, along which the tassels hang at regular and close intervals. The whole cord is wound round the hani a number of times, thus completing the decoration of one of the most beautiful products of the Maori workman. Above the decoration rises the long blade, beautifully polished, and having its edges sharp. The end of the blade, where it is widest, is generally shaped in a curve, but it occasionally takes the form of an obtuse angle.

Hani vary much in size. The smaller and the more delicate specimens were used only on ceremonial occasions, and then generally as adjuncts to oratory. Specimens made of whale's bone are sometimes seen. There are in museums a good many wooden specimens in which the whole blade is decorated with carving, but the writer has never seen an old example of this kind. The carving would impair the fighting value of the weapon.

Fig. 2 represents a tewha-tewha. Its length is about 45 inches. In fighting it is grasped just above the band of carving towards the pointed end, and this latter, as in the case of the hani, is pointed downwards. The blow is delivered with the sharp straight edge, to which the axe-like expansion acts as a make-weight. The pointed end is used, like the bayonet in "shorten arms," to deal with an opponent who has got within the guard, and also for dispatching a prostrate enemy. The tongue of the hani is used for the same purposes. The narrow band of carving (Fig. 6, right) towards the pointed end represents two human faces facing outwards. The single circle of shells serves for the eye of each face, the two circles thus doing service for four eyes. There is the same diminutive nose, the upper lip, and the teeth, as in the hani of Fig. 1. The pointed end represents an elongated tongue. Where the lower edge of the axe-like expansion joins the part we have called the blade, a bunch of feathers, said to be hawks', hangs from a small hole. A single side of the vanes is stripped from the quill, which is then cut so that blocks of it are left attached at small regular intervals to the remaining vane. These decorated vanes are then tied with binding of dressed flax in a large bunch and attached to the tewha-tewha. The same method of treating feathers may be seen in specimens of featherwork from Melanesia.

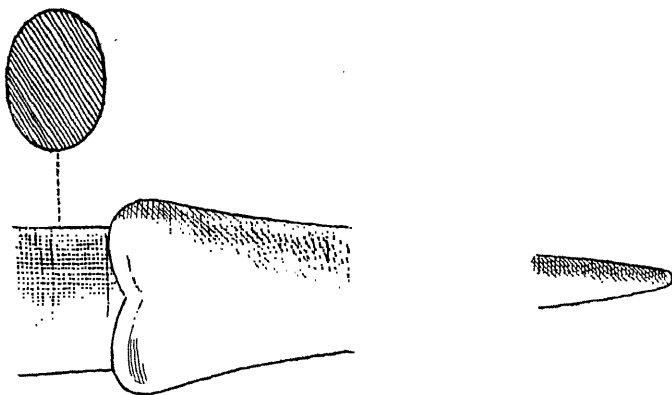
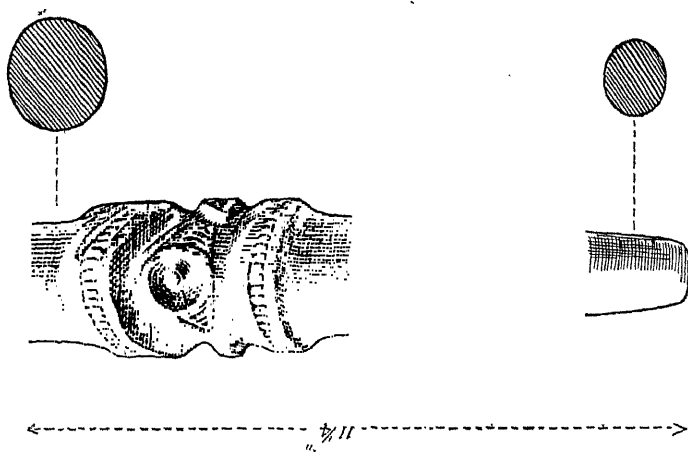
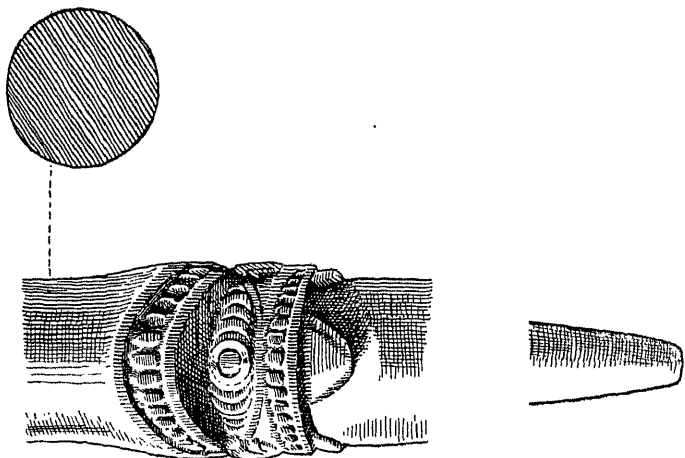


FIG. 6.

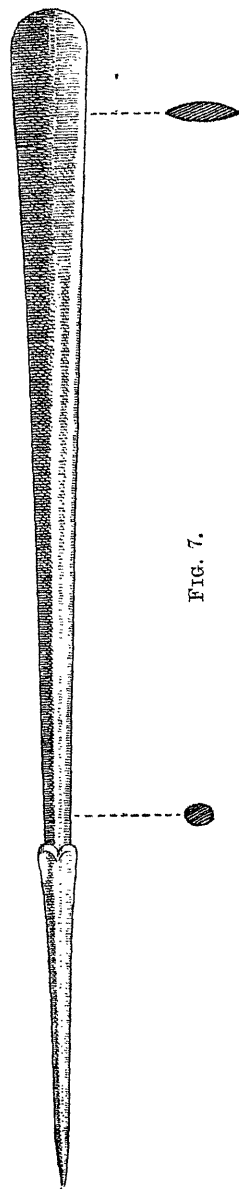


FIG. 7.

Tewha-tewha do not vary in size to the same extent as do hani. A very large proportion do not differ in measurements more than an inch or two from Fig. 2. An exceptional specimen in the Liverpool Museum measures 70 inches in length and 12 inches across the expansion. Small specimens made of whale's bone are occasionally seen, and there is in the Dominion Museum a small example from the Auckland district made of greenstone. This, like those of whale's bone, must have been used only on ceremonial occasions. Occasionally the expansion, and more rarely the blade, are decorated with carved spirals, but I know of no example in which this carving has not been executed with steel tools.

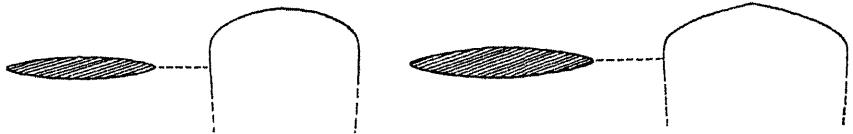


FIG. 9.

In the illustrations to Parkinson's account of Cook's first voyage to New Zealand the tewha-tewha, when shown, is almost invariably given an expansion unusually wide and having its upper edge markedly concave. This has probably arisen through Parkinson copying one model in all his illustrations. If this supposition is correct his model must have been a tewha-tewha brought home by Cook and now in the Dominion Museum, Wellington, N.Z. It is unique in possessing both the characteristics just mentioned.

Plate L, Fig. 3, represents the pou-whenua. It is about 60 inches in length and the greatest width of the blade is 5 inches. It is grasped above the carving, and the blow is delivered, as in the case of the hani, with either edge of the blade. In typical examples the proportions of the blade are those of the blade of the hani. The carving of this specimen is shown in detail in Fig. 6, middle. Fig. 7 represents the primitive form of the pou-whenua, in which the blade and the point are as strongly differentiated as in any of the types already figured but in which there is no band of decorative carving. The region below the grip is shown in Fig. 6, left. No examples of pou-whenua other than wooden are known.

The development from the simple pou-whenua (Fig. 7) of such a specialised form as the hani will best be seen by comparing a series of detailed drawings of the carving on the part below the grip in all these weapons. Fig. 6 represents the carving on three of the weapons already figured. The left specimen is almost plain. To this plain shape the familiar double human profile, so common in Maori carving, is added in the case of the second pou-whenua (middle). The carving of the tewha-tewha (left) is essentially the same. In this specimen the teeth are not indicated, an unusual feature. Fig. 11 represents the same region in three hani. The length of the pointed part below the human face is much shorter than in the case of the specimens of Fig. 6, and this shortness is, as is indicated by the Rarotongan club (Fig. 8), a primitive characteristic. In the left specimen the familiar double human profile appears. In the middle one the faces have been turned through 90 degrees and adapted to the new surface shape. The second face is, of course, wholly in reverse. In the right specimen



$\frac{1}{8}$ Full size
FIG. 8.

$\frac{3}{4}$ Full size
FIG. 10.

From a consideration of the facts adduced above, we may conclude that hani, tewha-tewha, and pou-whenua are closely related forms, and that their differences are superficial. Further, we may conclude that Fig. 7 represents a form more primitive than any of the others. Fig. 8, a light double-edged club from Rarotonga, is an allied form retaining some primitive features. One of these is the shortness of the point below the grip. This shortness is retained in the hani, as already noted. A second primitive feature is the ridge running down the middle of the blade, a feature which indicates its paddle ancestry. The shape of the end of the blade points backwards to the same ancestral form. It is worth noting that a characteristic pointing in the same direction may be seen in any collection of pou-whenua. The greater number have the end of the blade curved, as in Fig. 9, left. A few, however, have the end angular (Fig. 9, right), a feature which we must regard as primitive.

Fig. 10 represents a paddle club from the Solomon Islands. The handle has been sharpened. The ridge along the blade should be noted. From this form of club to the ordinary paddle

of the Solomon group is a small step, and every intermediate gradation of shape might be figured.

From the considerations already advanced we are, I think, justified in claiming a Melanesian ancestry for the two-edged clubs of Rarotonga and New Zealand. A question at once arises, Did the three Maori forms differentiate themselves in New Zealand, or must their point of origin be placed over-sea? Plate L, Fig. 5, which represents a light

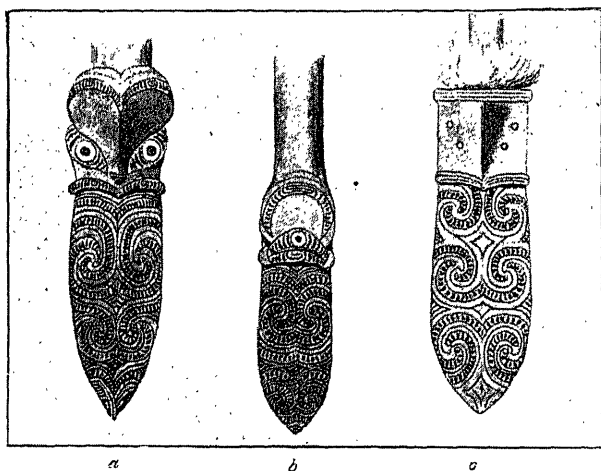


FIG. 11.

club from the New Hebrides, seems to indicate that the differentiation of the tewha-tewha form had already begun in Melanesia.

HANI, TEWHA-TEWHA, AND POU-WHENUA.

Illustrations.

(Plate L.)

- Fig. 1.—Hani. Length 72 inches. Locality Taranaki. Skinner Collection.
 Fig. 2.—Tewha-tewha. Length 42 inches. Locality unknown. British Museum.
 Fig. 3.—Pou-whenua. Length 60 inches. Locality unknown. British Museum.
 Fig. 4.—Detail carving of hani, Fig 1.
 Fig. 5.—Light club. Locality Aneitum. Length 42 inches. Royal Scottish Museum.
 (In Text.)
 Fig. 6.—Detail carving of Figs. 4, 2, and 3.
 Fig. 7.—Pou-whenua. Length 48 inches. Locality Taranaki. Skinner Collection.
 Fig. 8.—Light club. Locality Rarotonga. Length 90 inches. British Museum.
 Fig. 9.—Upper ends of pou-whenua: two types.
 Fig. 10.—Paddle club. Length 50 inches. Locality Solomon Islands. Skinner Collection.

Fig. 11.—Detail carving of three hani. After Balfour, "Evolution of Decorative Art," page 57.

H. D. SKINNER.

Sociology.

Long.

Some Australian Classes, Named and Nameless. By Richard C. E. Long.

98

In A. W. Howitt's *Native Tribes of South-Eastern Australia*, p. 211-5, are given the marriage rules of the Lachlan Wiradjuri and the Wonghibon tribes, both of which have the well-known Kamilaroi class names, Muri, Kubi, Ipai, Kumbo, with slight differences of pronunciation. Howitt's table shows that some of the marriages agree with the Kamilaroi system, while others differ from it. In what follows the former will be called regular, and the latter irregular marriages. The irregular marriages are all of one order of irregularity in that they are all marriages between classes which, in the Kamilaroi system, are father and son to each other and *vice versa*, that is, marriages between Muri and Ipai, and between Kubi and Kumbo. The exogamy of the phratries, Howitt's "primary classes," is not interfered with. It is, of course, well known that marriages of various orders of irregularity occur in many Australian tribes, but there is a remarkable regularity in the irregularity of these two systems which seems to admit of explanation.

Now, on examining Howitt's table of the Lachlan Wiradjuri system as corrected by Sir James Frazer (*Totemism and Exogamy*, i, p. 411), it will be found that the Mallee Hen, Padimelon, and Emu totems of Mukula phratry intermarry regularly with the Red Kangaroo, Black Duck, and Lace Lizard totems of Budthaurung phratry. So likewise Mallee Hen and Emu intermarry regularly with Snake of Budthaurung phratry. On the other hand, Mallee Hen, Padimelon, and Emu intermarry irregularly with Bandicoot of that phratry. But Bandicoot only intermarries regularly with Opossum of Mukula phratry, while Opossum intermarries irregularly with all the Budthaurung totems except Bandicoot. In the Wonghibon table we find as the regular marriages that Emu intermarries with Duck (black or wild) and Bandicoot, that Mallee Hen intermarries with Duck, and that Opossum intermarries with Kangaroo, while the irregular marriages are that of Mallee Hen with Kangaroo and Bandicoot, of Emu with Kangaroo, and of Opossum with Duck and Bandicoot. It therefore appears that in no case in either tribe do any two totems intermarry with each other both regularly and irregularly. We are reminded of the statement of the native that a difficulty as to the proper marriages might be got over by the totem names of the individuals (Howitt, *op. cit.*, p. 215).

What, then, is the explanation of this remarkably systematic irregularity? Mr. A. R. Brown (*Journ. Anthr. Inst.*, 1913, p. 192), has made the much-needed remark that the marriage rules of Australian tribes are not in any way affected by the existence of two or four named divisions. Two instances of this are the Dieri, who have only two named phratries, but are really divided into eight classes by the use of the terms of relationship, and the Southern Arunta, who have four named classes, but are also really divided into eight classes. The last example is important because the system of eight named classes is spreading in this tribe, having apparently reached it from the north. In this article I use the term "anonymous classes" to denote the divisions which are in fact made in a tribe by the operation of the terms of relationship. These anonymous classes usually extend to all the other tribes with which a tribe is in contact.

Dealing now with the Wiradjuri, let us suppose that there were two adjoining tribes, A and B, and that all the present Wiradjuri totems except Opossum and Bandicoot belonged to A tribe, while those two totems belonged to B tribe. Suppose further that A and B were each divided into four anonymous classes and that the two tribes intermarried and recognised each others anonymous classes, or, to put it in another way, that each native knew his classificatory "brother," &c., in the other

tribe as well as in his own. Let the anonymous classes be distinguished as C, D, E, F, with the following rules of marriage and descent :—

Male	Marries	Children are
C	E	F
D	F	E
E	C	D
F	D	C

Then let the four class names be introduced in a part of the A tribe remote from the B tribe and let the same four class names be introduced into the B tribe at a part remote from the A tribe. Suppose then that in A tribe the anonymous classes were named as follows :—C, Muri ; D, Kubi ; E, Kumbo ; F, Ipai ; and that in B tribe they were named C, Kubi ; D, Muri ; E, Ipai ; B, Kumbo. Then if the use of the class names extended in each tribe until from each side it reached the boundary between the two tribes, the result would be that while, for example, a C (now named Muri) of A tribe would marry an E (now Kumbo) in his own tribe (a regular marriage), yet if he married an E of B tribe she would now be called Ipai, and the marriage would be irregular. A C of B tribe (now Kubi) would marry an E of his own tribe (now Ipai), which would also be a regular marriage, while if he married an E of A tribe she would now be called Kumbo, and the marriage would be irregular. And so with all the other class names, producing exactly the rules given by Howitt. (For simplicity I have used same name for both masculine and feminine of the class names, as Ipai instead of the feminine Ipatha, &c.) In the above I have assumed two separate tribes, A and B, to make the explanation clearer, but it would equally apply in case of a large tribe if the class names were independently introduced into different parts of it, and if in one part only the A set of totems were found and in the other part only the B set. This is more probably what did happen. Some totems are in fact more numerous in one part of the tribe and some in others (Howitt, p. 216).

In the Wonghibon system the same explanation applies so far as the marriages of the Opossum and Kangaroo totems, by assuming that they belonged originally to a separate tribe or part of a tribe. A difficulty remains in the case of the Bandicoot totem in this tribe, which by theory would belong to the same original tribe as the Emu, Mallee Hen, and Duck totems. It marries regularly with Emu and irregularly with Opossum, all which is in accordance with the theory, but it marries irregularly with Mallee Hen where one would expect it to marry regularly. I think the explanation is that at the time and place where the other Wonghibon rules came into operation as suggested, there were no members of the Bandicoot and Mallee Hen totems within reach of each other, and that subsequently, at the time and place where they did come into contact, the old men knew of the Wiradjuri rule of Mallee Hen marrying Bandicoot irregularly and adopted it. The two tribes adjoin and are closely related.

Something similar must have occurred with the Mardudhunera and Ngaluma tribes (A. R. Brown, *op. cit.*, p. 177). The four class names in these two tribes are the same with slight changes of pronunciation, but in intermarriages between the tribes the classes are not all equated with those of the same name. Two of the four are reckoned as the same class in each, but the other two are transposed, and in so far it differs from above theory, which requires the classes in each phratry to be transposed.

It is instructive to note that the Ngaluma and Mardudhunera, who have patrilineal descent of the totems, have transposed two classes which are father and son classes to each other and *vice versa*, while the transposition required in the case of the Wiradjuri and Wonghibon, who have matrilineal descent of the totems, is of two

classes which are mother and daughter to each other and *vice versa*. No phratry names have been found by Mr. Brown, but we may suppose that if these tribes recognised phratries, such would descend in the male line, and so the transposition would not affect the exogamy of the phratries any more than in the case of the Wiradjuri and Wonghibon. No doubt the class names reached the Mardudhunera and Ngaluma independently, and when the use of the names spread to the boundary of the two tribes from each side, they found that two of the classes with same names were not the same anonymous classes but were father and son classes to each other.

If the foregoing explanation of the Wiradjuri and Wonghibon rules is the right one, it affords a further proof of the existence of classes completely developed before any names were given to them. Another piece of evidence in the same direction is the geographical distribution of certain sets of class names far beyond the limits of a particular language. The fact that the distribution of the four class names does not coincide with that of the phratry names is another. It is evident that when names were given to the anonymous classes in any locality they would be likely to spread, owing to the convenience in identifying the classes of strangers instead of making genealogical inquiries, and the direction in which they spread need not have been the same as that of the phratry names, which perhaps themselves spread in the same way but at a different time.

No class names of a four-class or eight-class system have been found out of Australia, but there is a distinction to be observed between the two systems, for while no rules even applying only to the nearer kindred have been found outside of Australia which would give the effect of the eight-class rules, yet on the other hand the special prohibition enforced by the four-class system, namely, that against marriage in the generation immediately above or below one's own, is found elsewhere among peoples having the system of relationship called by Morgan "Turanian," *e.g.*, among the Fijians. Here, however, no marriage prohibitions are enforced when the relationship is distant though traceable, and besides the relationship terms are not extended so as to take in the whole community, so that there are no anonymous classes in the sense in which I use the term.

Dr. W. H. R. Rivers (*The Todas*, page 490) found that, so far at least as a man's own and his mother's clan, the distinction of generations was made by the relationship terms among the Todas, thus making an anonymous division in addition to the named clans, but it does not appear that these relationships are extended to take in the whole community. It is quite clear that for marriage purposes there are no anonymous classes, because the marriage of a man with a woman, and then with her sister's daughter, of which he gives an instance on page 522, would be contrary to the rules of a four-class system, and besides the different clans could not intermarry as they do if such were the case.

It is much to be wished that those who are investigating kinship systems, especially in Melanesia, would direct their attention to the degree of extension which the terms of relationship receive, and to the question whether any of them, and if so which, are extended to take in the whole community.

In sharp contrast to the four and eight-class systems, the system of two phratries is practically world-wide. This, and the fact that it underlies the four and eight-class systems, should make us cautious in concluding that it, too, began in the form of anonymous divisions distinguished by the terms of relationship. Still, there are cases where the phratries are anonymous (Rivers, *History of Melanesian Society*, I, page 22, and II, page 501).

The many instances of the phratry names showing some contrast in colour, size, rank, or intelligence have a very artificial appearance, as if the names were given to phratries already existing, but anonymous. There are the great and little

totems in Mabuia, the noble and commoner *rosa* in Fiji, the New Britain phratries named after the wise and foolish spirits, &c. The Raga phratry names, Tangaro and Sukwe (Rivers, *op. cit.*, I, page 190), provide a similar case, because Dr. Codrington (*Melanesians*, page 169) states that Tangaro and Snqe (Sukwe) are contrasted as the wise and foolish spirits in that island. Here, too, just as in Australia, the phratries are equated with those of the Banks Island, though the names are different.

Reviewing all these systems, we find a remarkable progression, the two-phratry system world-wide, the strict four-class system confined to Australia, but with approaches to it elsewhere limited to the nearer kindred, and the eight-class system absolutely confined to Australia.

I am not concerned here with any theory of the origin of either class or phratry divisions, but I wish to point out that those who put forward theories of their origin must take into account that the four-class and eight-class systems, and perhaps the dual system, existed at first anonymously, with all their rules complete. This is very different from Sir James Frazer's conclusion from the existing Australian rules (*Totemism and Exogamy*, I, page 400), that an aversion to such marriages existed before any tribal ordinance forbidding them. There may have been such an aversion before the present rules came into being—very probably there was—but these definite rules and penalties are much more than an "aversion"; they are themselves the system to be explained.

RICHARD C. E. LONG.

Detection.

Parsons.

A Zuñi Detective. By Dr. Elsie Clews Parsons.

99

He was a medicine-man of the *Newehwe tihyilana* or Galaxy fraternity, but none of the three detective methods about which he told me was, he insisted, a fraternity secret or limited to the use of fraternity members.* Any one could make use of them, providing he had never in his life been bitten.† Some persons, however, would have more power than others. The father of my practitioner, I learn from Dr. Kroeber, was a medicine-man possessed of it. My practitioner seems to have purposed passing on the power in turn to his son, since he had taught him the medicine songs (*see below*). But the son has probably become too Americanised to practise. Two of the methods are Zuñi, the third is Navaho. The Navaho method my practitioner had learned from a Zuñi called Mona, who had learned it from a Navaho. It was the method he favoured, being less dangerous to the practitioner than the other two.

All three methods are used for the detection of missing things, articles or animals—animals lost, strayed, or stolen. Or if a horse or burro were found dead, no reason appearing, one of these methods would be practised to learn the facts of the case. For detecting murder or adultery‡ the methods are not used.

In all three methods a narcotic is used, and a trance results. During the trance the picture of the situation or incidents in or through which the missing article has

* *Cp.* Stevenson, M.C., "The Zuñi Indians," p. 386, XXIII (1901-2), *Ann. Rep. Bur. Amer. Ethnol.*; "Ethnobotany of the Zuñi Indians," p. 39, XXX (1915), *Ann. Rep. Bur. Amer. Ethnol.*

† There are several Zuñi beliefs about disqualification of some kind from bites. For example, if the cord of a new-born infant begins to "run," someone who has been bitten has been in the room, it is believed, and unless he is found and waves some ashes around the heads of mother and child, the child will die. The ashes must be waved four times, four being the obsessive Zuñi numeral.

‡ If adultery occurs while a husband is hunting, the deer, it is believed, "will tell him," the buck mounting the doe. The hunter has then to shoot both and take out their hearts. On his return home he will find his wife and her lover sick. To cure them, he has to rub them with the deer heart mixed with meal, the doe's heart for the woman, the buck's for the man. Otherwise, if he fail to take pity on them, they will die.

been mislaid or taken will unfold itself. That his face may not be recognised by a seer, a thief will smoke when in the act, knowing that then only his smoke-enveloped head will be seen.*

In details the three methods vary. In the first method the root is powdered and rubbed on the eyes and around the ears. In the second method the root of the plant narcotic is chewed. In the third, or Navaho, method, in which there are two persons operating, he who sings the songs, Navaho songs, both music and words—he, the singer, chews the root and rubs it on his body; while he who goes into the trance has the “medicine” rubbed on each finger of the right hand up to the elbow. There are five different medicines, a different one for each finger. It is a medicine-man who rubs on these medicines, the hand first being carefully washed. Besides the medicines, certain magic properties are also in use—a stone concretion looking like two eyes, and a root, one end of which ends in several hooks or claws, call *unawa shonchi* (*unawa* = see; *shonchi* = claw, nail). A little altar (*teshkwiná*) is set up, and these objects are presumably laid upon it.†

The plant used in the first method has to be gathered close to Kóluwala, the Sacred Lake, the only place where it is said to grow. Special journeys are not made for it, but when it is gathered prayer plumes are planted, and it is kept wrapped in turquoise and shell beads. None but its possessor is allowed to touch it. Its Zuñi name is *tenatseli*.‡

The plant used in the second method is the Jamestown Weed (*Datura meteloides*). This plant, the Zuñi say, was once two persons. And it is they who come during any trance, whatever the method of inducing it, to guide the seer to the place of vision. The two are referred to as “the little people,” sometimes appearing as a boy and girl, sometimes as an old man and woman. Their names are Aneglakya and Aneglakysitsa.§

To one sick from bewitchment *tenatseli* will be given, that he or she, guided by “the little people,” may have a vision of the witch responsible.

In describing how dangerous an overdose of this plant might be, my informant told me how it had been used in what she referred to as a case of suicide, the only suicide among the Zuñi she had known. The story is a bit of Zuñi scandal, and I give it as such, but after all is not the scandal of every community interesting—psychologically if not institutionally? The story goes that a medicine man, who had been called in to knead the abdomen of a sick woman—a very common Zuñi practice—asked to have her removed into a room apart, as he wished to give her medicine to see who had bewitched her. He too spent the night in that room. In the morning he was found dead and his patient unconscious and in a badly abused

* According to Mrs. Stevenson a rain priest administers the narcotic to the man who has been robbed. During the resulting trance the rain priest may not smoke. Were he to smoke, “the man” could not see the robber, as Aneglakya [*see* below] does not like smoking at this time.” “Ethnobotany of the Zuñi Indians,” p. 90.

† Dr. Kroeber has given me this information, information secured by him from the very practitioner I cite. From him Dr. Kroeber also secured the objects for the American Museum of Natural History. They are contained in a little buckskin sack, together with a turquoise bead, a common appendage of supernatural instruments.

‡ Mrs. Stevenson refers to “*tenatsüli*” as merely a mythical plant. “Ethnobotany,” p. 64. In “The Zuñi Indians,” p. 124, Mrs. Stevenson refers, however, to the use of the “mythical plant” in a ceremonial as if it were an actual plant.

§ Mrs. Stevenson also gives this tradition about the plant couple (“The Zuñi Indians,” p. 385: “Ethnobotany,” p. 46); but she attaches it to the only narcotic she mentions—the Jamestown Weed. The introduction of “the little people” into the other methods would seem to be a rather interesting instance of syncretism; but the subject needs further study. The little people in the first method are referred to as *tenatseli atsuna* (*a*=plural prefix; *tsuna*=little).

condition. The gossips recalled that this man had often been heard to say he would like to die with a beautiful woman.*

The danger of death aside, the use of the Jamestown Weed has risks. Two Zuñi were mentioned to me as having their skins "spotted" from using the narcotic—or from using it without a subsequent emetic, I infer Mrs. Stevenson's informant would have maintained. "Should the warm water not be drunk and the medicine thereby thoroughly ejected, the flowers of *Datura* would appear over the body."†

Although the third method is Navaho, "the little people," supposedly of Zuñi origin, figure in it, for it is they again who guide the doctored hand. After the doctoring, the seer sits down and holds out his hand. When the first song is sung by his colleague the fingers of the hand begin to move in the order the medicines have been rubbed on. When the second song is sung all the fingers become "crazy" all over and numb. There is a third song to quiet the hand. In this case as in the others the seer spends the night alone. His colleague excepted, none is allowed to touch him or even see him. Should any one who did not "believe" come near him, the doctored hand would strike that unbeliever.‡ The room the seer stays in, too, must be emptied—lest he "hurt himself against anything." Moreover, in the Navaho method a medicine called "lion root" is rubbed on the seer, so he will not get hurt knocking about.

Nevertheless the experience is very trying. The next day the seer is upset. His head and eyes are heavy. He feels nervously on edge, "as you would in a thunder-storm," he said. So trying, indeed, is the performance, that, lucrative as it is—a seer might be given as much as \$10 worth of blankets—my friend has retired from practice. He is too old, he says, it hurts too much. Only a few months ago he declined a case of a lost horse.

ELSIE CLEWS PARSONS.

Kordofan: Ethnography.

Seligman.

Stone-Headed Club From Southern Kordofan. By Professor **100**
Seligman, M.D.

When travelling in Southern Kordofan in 1910 I saw a certain, not very large, number of clubs with spherical or sub-spherical heads. The finest example, illustrated in the accompanying figure, and now in the British Museum, was obtained from the Lafofa of Jebel Eliri. The head, which has a diameter of about 6.5 cm., is of smoothly ground hard igneous rock, consisting of a black matrix embedding many angular or sub-angular whitish masses. As shown in the figure, this is hafted on to a stout and very strong kind of cane about 80 cm. in length; one extremity of the cane has been tapered to receive the stone, the fastening being made secure by a rough iron ferrule hammered over the end.

I could not ascertain the exact provenance of these clubs, which were far from common, but it seems certain that they were not made on any of the hills between the Nile and Jebel Talodi, nor did I see any during a journey in Northern Kordofan,

* According to Cushing *tenatseli* (*te-net-sa-li*) is a love charm, making women follow its possessor. —Proctor, R. D., *The Song of the Ancient People*, p. 59. New York, 1893.

† "The Ethnobotany of the Zuñi Indians," p. 90.

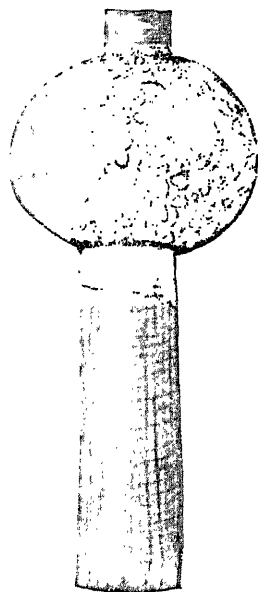
‡ One case was told me where, because the client did not believe, "the little people" had not appeared to the seer and his vision was imperfect. He could only tell his client she would find the lost property—some money—the following day before noon. The seer and his singer departed, leaving the woman much put out for having had to pay for such inadequate information. So angry did she remain, in fact, that the next morning she began a search on her own account for her lost money. Just as the seer and the singer were returning to give back to her their pay, they having heard of her dissatisfaction, at that very moment she found her money tucked away in an old box, and it was not yet noon.

in 1912, from Bara to beyond Jebel Kaja, in the neighbourhood of the Darfur border, although MacMichael has figured a number of pierced stones, some of which are sub-spherical, from Jebel Haraza and Jebel Um Durrage, in Northern Kordofan.* Probably the club-heads are, or were, made somewhere in Central Kordofan; the specimens I examined were not all of one kind of rock, nor was the hafting in every case of the same quality.

With regard to the purpose of these clubs, it was said that they would be used in fighting and hunting the larger carnivora, when an attempt would be made to strike a powerful two-handed blow on the neck immediately behind the base of the skull.

Their occurrence in North-Central Africa is of considerable interest. They are unknown among the Negro tribes; the form of the stone has nothing in common with the perforated discs from Meroitic sites, which I have described elsewhere, and it is by no means certain that they are in any way related to those figured by MacMichael. The question arises whether, in spite of their smaller size, they may not have some affinity with the Bushman *!kwe*, or pierced stones used for weighting digging sticks. A pierced stone, considered by Perinquey to be a *!kwe*, has been found on the Tanganyika plateau, while the same author has published a bushman painting in which a pierced stone is shown hafted as a club.†

C. G. SELIGMAN.



STONE-HEADED CLUB FROM KORDOFAN. $\times \frac{1}{2}$.

REVIEWS.

France: Archæology.

Baudouin.

La Sépulture Néolithique de Belleville a Vendrest (Seine-et-Marne), Fouille et Restauration. Étude scientifique. Rapport Général par le Dr. Marcel Baudouin, avec la collaboration de MM. L. Giraux, A. Guébbard, Edmond Hue, Henri Martin, Ph. Reynier, et E. Taté. Paris. Société Préhistorique Française. 1911. 40 Figs. in text, 16 Plates. Pp. 264.

L'Ossuaire de la Ciste des Cous. A Bazoges-en-Pareds (Vendée) par Dr. Marcel Baudouin et Lucien Rousseau. Extrait des Mémoires de la Société Préhistorique Française (1914-15). Paris. Bureau de la S.P.F. 1915. 10 Plates, 44 Figs. Pp. 91.

In the summer of 1908 M. Ph. Reynier, of Lizy-sur-Oureq—a small town some 30 miles to the north-east of Paris, and situated in the Department of Seine-et-Marne—informed the council of the Prehistoric Society of France that a Neolithic sepulchre of a peculiar kind had been discovered in the neighbouring parish of Vendrest. The site of the discovery was on the southern flank of the small wooded hill of Belleville, the sepulchre being situated about 130 feet above the level of the adjoining valley. Great sandstone blocks occur on the hill, which are hewn at the present day for paving purposes. It was while engaged on one of these great blocks—one which proved to be an essential part of the roof of a tomb—that the workmen discovered the Neolithic sepulchre of Belleville. The Council of the Society at once took steps (1) to purchase the site for the nation; (2) to carry out a complete and systematic

* *The Tribes of Northern and Central Kordofan*, p. 88. These stones are not used as club-heads, and probably—as suggested by MacMichael—they are to be regarded as indicating northern (Meroitic) influence.

† *Annals of the South African Museum*, VIII (1911), pp. 112, 113.

investigation of the structure and contents of the sepulchre; (3) to restore and preserve the tomb in its original form; (4) to publish a full and detailed account of the excavation and of the various objects discovered in the tomb. No one who studies the monograph which has been issued by the Société Préhistorique Française can fail to offer thanks wholeheartedly to its Council, and particularly to its secrétaire général—Dr. Marcel Baudouin.

The discovery at Belleville was made in 1908; the sepulchre was excavated during 1909–10; Dr. Baudouin's report appeared in 1911. When preparing his Belleville report, Dr. Baudouin's attention was drawn to a paragraph in a provincial newspaper announcing the discovery of human remains at a prehistoric site in the Department of Vendée—in the West of France. A brief preliminary inquiry led Dr. Baudouin to suspect that a Neolithic burial place had been opened—a suspicion which was soon verified by a personal visit. He found that the remains had been exposed by local workmen in the course of removing material for road-mending from a great heap of stones, known locally as a *brosse*. A few yards to the east of the *brosse* was an *allée couverte*. He quickly recognised that the neighbouring village of Bazoges-en-Pareds, which lies over 20 miles inland from the shores of the Bay of Biscay, was the centre of a country dotted over with graves and monuments of the Neolithic period.

Here, again, the Prehistoric Society of France stepped in; the site was purchased for the nation; M. Lucien Rousseau was associated with Dr. Baudouin to carry out a systematic investigation; when that was finished the cairn-tumulus was restored, and a full account published just before the outbreak of war. Thus the two monographs noted above are concerned with discoveries made in two widely-separated parts of France, and are enduring monuments to the enterprise and foresight of our French colleagues. Both sites belong to the Neolithic period; both were designed as final resting places for the remains of human beings; most of the people buried in them had longer and narrower heads than the modern inhabitants of France.

At the Belleville site a sepulchral chamber had been excavated on the southern slope of the hill. One can guess why the site had been chosen. Great natural blocks lay on the surface—blocks of sandstone about 15 feet long, nearly 8 feet wide, and over 4 feet thick. They lay on a loose, easily-dug sand. The sand under these blocks had been excavated until a chamber was made with a length or depth of 20 feet, a width of 6 feet, and a height of $3\frac{1}{2}$ feet. The doorway placed on the the south aspect of the hill was narrow, and bounded on each side by a dressed upright stone. The sides of the chamber were built up with stones. The floor was roughly paved. When the earth was removed from what proved to be the doorway to the chamber no sign was to be seen of any boulders which might have been used to block the doorway; the chamber was almost full to the roof of sand, fallen blocks of stone, and *débris*.

A systematic examination revealed isolated parts of at least 130 individuals—representing men and women, infants and children, of all ages. There was a considerable proportion of people with short, wide heads. The men had been of medium stature—about 5 feet 5 inches or 5 feet 6 inches. Not a single intact skeleton was found. In the deepest part of the contents of the tomb, and therefore in the older part, about thirty small heaps of imperfectly cremated bones were found, each heap being mixed with charcoal, and in most cases placed on a slab of stone. The paving stones showed signs of having been subjected to fire. The flints found in the deeper deposit—knives, flakes, scrapers, polished axes—often showed heat splintering.

In the more superficial and recent deposits of the sepulchre the human bones

were no longer burned; they occurred in pockets. They formed isolated heaps. Occasionally the various parts—at the knee joint, at the neck, or at the elbow—were in natural juxtaposition, showing that when placed there these joints must have been intact and the bones united by ligaments. But not a single complete skeleton was found, only jumbled-up heaps of bones.

How are we to account for such heaps or isolated pockets of human remains? Dr. Marcel Baudouin has reached very definite conclusions—more definite than the reviewer thinks there is warranty for. To Dr. Baudouin the explanation is simple; the neighbouring tribe which buried at Belleville exposed their dead; at first they gathered up the bones, burned them, and laid their ashes to rest in the sepulchre which the modern stonemasons brought to light; subsequently they gave up burning, and simply deposited the desiccated remains in the sepulchre.

Is that the only theory which will account for the isolated pockets of bones? In modern times we see that there are at least three agencies which cause disturbance of grave contents: (1) There is the gravedigger; (2) there are burrowing or prowling animals; (3) there are the natural movements of overlying soil which presses asunder the bones as the soft parts decay. Dr. Baudouin has considered all of these, but favours his own explanation, that the natives of France—in Neolithic times—exposed their dead, and after desiccation gathered the remains for final interment in a sepulchre or ossuary.

We think his inferences go beyond the strength of his facts. He found remains of 130 individuals in the sepulchre at Belleville. We must suppose that the local tribe which used the chamber was at least 100 strong. They would have to make at least four visits yearly to the sepulchre. In even a century they ought to have deposited some 300 or 400 individuals, but we find only 130. The inference we draw is that the record afforded by a sepulchre, however valuable it may be in filling up a blank in our knowledge of mankind, is a very imperfect and damaged document, and that a vault used by many subsequent generations may show just such a disturbance as that at Belleville, even if burials were made much as they are to-day. We should be surprised, however, if we found that nearly 10 per cent. of a modern population showed evidence of having been trepanned, yet the remains found at Belleville leave us in no doubt but that the operation was practised with remarkable frequency in Neolithic times. We do not think Dr. Baudouin is justified in regarding the constriction—annular constriction—which is found in many Neolithic skulls, particularly among those at Belleville, as an artificial deformation. Annular constriction of the skull, a depressed groove across the skull just behind the junction of the frontal with the parietal bones, is very common in modern Englishmen, among whom no artificial deformation is practised.

The Neolithic sepulchre in Vendée was of a different type. The cairn or tumulus, composed chiefly of limestone slabs, was roughly circular, its diameter being about 70 feet. In the centre was a circular cist or chamber, with a diameter of 13 feet. The cist was lined by 12 upright slabs, rising to about $3\frac{1}{2}$ feet above the surface of the soil. A passage led to the central chamber; it was about 3 to 4 feet wide and lined on each side by large upright slabs. Dr. Baudouin rejects M. Chauvet's theory that in such tumuli the central chamber or passage had been roofed upon wooden supports. As restored, the central chamber and passage are represented as open to the sky. The central chamber and passage were found by the excavators to be filled with stones and earthy *débris*; the human remains—representing at least 130 individuals—were found in heaps or pockets amongst the stones. To account for the peculiar and isolated arrangement of the remains, Dr. Baudouin adopted the same explanation as at Belleville—the bones had been deposited in the sepulchre after the body of the dead person had been exposed for a long time to the action

of decomposition. In the broken condition of the bones he sees evidence of a ritual. Yet human bones do usually become broken in modern graves—even when untouched by man or beast.

We do most heartily congratulate the Société Préhistorique Française on the invaluable services it has rendered to archaeology and to our knowledge of our Neolithic ancestors, and yet we would also counsel reservation of judgment on many of the inferences which have been drawn by Dr. Baudouin. A. KEITH.

Arabia: Numismatics.

Hill.

Ancient Coinage of Southern Arabia. By G. F. Hill. (From *Proceedings of the British Academy*. Vol. vii.)

102

In this article Mr. G. F. Hill deals with a curious and little-known group of coins, issued in South-western Arabia by the rulers of the Sabæans, Himyarites, and Minœans during a period which may be roughly stated as extending from 300 B.C. to 100 A.D. In fabric these coins may, for the most part, be traced to the earlier or later coinage of Athens, bearing the head of Athene and the owl. In some a ringleted head of Arab type replaces that of Athene, and in some a head resembling the long-necked head of Augustus (which was also imitated about the middle of the 1st century A.D. by Kadphises I, of Kābul). In these coins the owl of earlier or later type persists throughout. Some of the imitations of the Athenian coins of the 4th century B.C. have also a strong resemblance to some found in Bactria and India. The only exception to the Athenian type is a tetradrachm of Alexandrine style, attributed by Mr. Hill to the Minœans. A few smaller coins seem to belong to the same group.

Notwithstanding the Attic influence the system of weights follows the Persian standard. In spite of the proximity there is no trace of Egyptian influence, from which Mr. Hill argues that the trade-route by which the Attic coins travelled must have been a purely overland track from Syria, corresponding with the modern Pilgrims' route. Traces of early contact with the Persian Gulf can also be inferred.

From the above remarks it will be gathered that Mr. Hill's careful study of these coins is of value, not only to numismatists, but also to students of the fluctuating relations between Greek and Persian influences, and their bearing on the civilisation and trade of the pre-Islamic Arabs. M. LONGWORTH DAMES.

Craniology.

Thomson.

A Study of the Craniology of the Mori-ori. By Eveline J. Thomson. *Biometrika*: Vol. XI, Parts 1 and 2. November 1915. Page 82.

103

The Mori-ori of the Chatham Islands occupy an almost unique position among the island peoples of Polynesia. Their traditions tell us that they came to the Chatham Islands 28 generations ago, and that since that time they have held no intercourse with the outer world. If this traditional evidence is to be believed, and there seems at present little reason to doubt it, we may conclude that the Mori-ori has preserved during seven hundred years the racial type that inhabited New Zealand at the time of his departure for the Chathams. We know that for many centuries Melanesian influence, cultural as well as racial, has been penetrating Polynesia, and that this influence has left its mark on the Maori race and on Maori art. But we are justified in concluding on traditional grounds that for seven hundred years Melanesian influence has left the Mori-ori people untouched.

This conclusion receives very remarkable support from the craniological research of Miss Eveline J. Thomson. Her work has been carried out with the care and thoroughness characteristic of the Research Laboratory with which she is connected. Her monograph is accompanied by 22 fine plates. The material on which she worked consisted of 63 skulls in the Museum of the Royal College of Surgeons, but

she was also able to make use of measurements of 50 skulls made by the late Dr. Scott, of Otago University, and of 10 measured by Dr. Duckworth. The material available, therefore, is not as large as could be wished, but is large enough to warrant four very interesting deductions:

- (i) While the Maori are the nearest of the races selected for comparison with the Mori-ori skulls, both Aino and Fuegian are surprisingly close.
- (ii) Seventeenth century English are more distant than Fuegian, but have very far from the deviation of a race like the Sudanese negroes.
- (iii) The current view that the Mori-ori, like the Maori, are an intermixture of Polynesian and Melanesian stock hardly receives confirmation. The Mori-ori stand nearer to the Londoner of the seventeenth century than to the negro.
- (iv) The Maori themselves are still more closely allied to the Fuegian than is the Mori-ori.

Conclusion number (iii) is especially interesting, as it is in direct conflict with the traditional Maori evidence of T. Whatahoro, who states that the first inhabitants of New Zealand were Melanesians, or at any rate Negroid. This evidence has, to the present writer, always seemed doubtful. It appears to run counter to the evidence of Mori-ori art. Like much of Whatahoro's traditional evidence, what he says about the primitive Melanesian element in New Zealand calls for very careful scrutiny.*

Miss Eveline Thomson's concluding remarks are interesting: "If the racial affinities I find in the Mori-ori do not wholly coincide with the view of more authoritative anthropologists, they may at least serve as suggestions for the future examination of the primitive races who still, or till recently, bordered the Pacific Ocean. I feel confident that in the craniology of these races may be found a definite key to the evolution of man in prehistoric times; there have, I believe, been more extensive folk-wanderings, possibly rendered feasible by geological changes, than we have yet recognised. Craniological material from the outlying islands, and the fringes of the Pacific continents—if feasible of extinct races—is what one must above all things desire."

It is much to be hoped that Miss Thomson will continue the work so successfully begun. The Easter Islanders occupy a position on the outskirts of the Pacific analogous to that of the Mori-ori. It is a most suggestive fact that the arts of the two peoples are closely related. It appears, therefore, that a study of the craniology of the Easter Islanders has a double chance of unlocking racial secrets in the Pacific.

H. D. SKINNER.

Race Sentiment.

Bryce.

Race Sentiment as a Factor in History: A Lecture delivered before the University of London, on February 22nd, 1915. By the Rt. Hon. Viscount Bryce, O.M. London: University of London Press. Hodder and Stoughton. Price 1s. net.

104

In the opening paragraphs of his Creighton Lecture, Lord Bryce disarms the anthropologist by setting aside as beyond his scope all discussion of what constitutes race, and takes the human stocks to be "just what the ordinary books of geography and history represent them." Further, he distinguishes the sentiment of race from Tribal Instinct and the sentiment of Nationality. Having thus clearly defined his position, he shows in a rapid survey of the critical epochs of the ancient and modern world that the growth of racial sentiment as a determining factor in the struggles for supremacy among nations is on the whole modern, and did not become of any importance until the French Revolution.

E. N. F.

* Practically all of Whatahoro's published material has appeared in *The Journal of the Polynesian Society* and in that Society's Memoirs.

India : Archæology.

Archæological Survey of India. Report, 1912-13. Part I.

With the Report for 1911-12 the first part of that for the following year may be considered. The second part is not yet issued.

This part is occupied by the Director's Annual Report, which contains matter of exceptional interest regarding the excavations he has conducted on the site of the ancient city of Taxila and at the Buddhist shrine of Sānchī. A detailed account of the Taxila excavations is promised by Sir J. Marshall for the second part of the Report, and a full notice of this very important work, involving as it does questions of great historical importance, must be deferred until its appearance.

The excavations at Sānchī have become possible through the public spirit and generosity of H.H. the Begam of Bhopāl, in whose State the celebrated Stūpa is situated. The results are of great importance, and several buildings surrounding the great Stūpa have been brought to light. Some of the earlier restorations of Sir A. Cunningham and Gen. Maisey have been shown to be erroneous. Good grounds are given for holding that the great gateways are not so early as has been generally supposed, and should be dated not earlier than the latter half of the 1st century B.C. An abstract is also given of Dr. Spooner's excavations on the site of Pataliputra, of which a fuller account has been communicated by him to the *Journal of the Royal Asiatic Society*.

M. LONGWORTH DAMES.

105

ANTHROPOLOGICAL NOTE.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

106

(Donor indicated in parentheses.)

Sechuana Proverbs, with Literal Translations and their European Equivalents. By Solomon T. Plaatje. 5 × 7½. 98 pp. Illustrations. Kegan Paul, Trench, Trübner and Co., Ltd. 3s. net. (Publishers.)

Sierra Leone : Its People, Products, and Secret Societies. By H. O. Newland. 8¾ × 5½. 247 pp. 19 Plates. John Bale, Sons and Danielsson, Ltd. 7s. 6d. net. (Publishers.)

Classified Catalogue of the Library of the Director-General of Archæology. Supplement III. Additions, 1912-15. (Sir J. Marshall.)

European and Other Race Origins. By H. B. Hamay. 9 × 6. 472 pp. 3 Maps. Sampson Low, Marston and Co., Ltd. 21s. net. (Publishers.)

Earliest Man. By F. W. H. Migeod. 8¼ × 5¾. 128 pp. Kegan Paul, Trench, Trübner and Co. 3s. 6d. net. (Publishers.)

My Siberian Year. By M. A. Czaplicka, F.R.A.S., F.R.G.S. 8¾ × 5½. 309 pp. 37 Illustrations and Maps. Mills and Boon. 10s. 6d. net. (Publishers.)

Collection Zaussoïlov au Musée Historique de Finlande à Helsingfors. I : Catalogue Raisonné de la Collection de l'Âge du Bronze. By A. M. Tallgren. 45 pp. 16 Plates. La Commission des Collections Antell, Helsingfors. 20 fr. (Author.)

Arboreal Man. By F. Wood Jones, M.B., D.Sc. 9 × 6. 224 pp. 80 Illustrations. Edward Arnold. 8s. 6d. (Publishers.)

The Indo-Aryan Races. By R. Chandra. Part I. 9¼ × 5¾. 274 pp. Varendra Research Society, Rajshahi. 6s. 8d. (Author.)



FIG. 1.—GALLA KINGS.



FIG. 2.—A GALLA AND HIS WIFE.



FIG. 3.

TYPICAL PHOTOGRAPHS OF THE GALLA.

ORIGINAL ARTICLES.

Ethnography.

With Plate M.

Phillipson.

Notes on the Galla. By J. H. Phillipson.

107

The following notes on the Galla were collected during a residence of 4½ years in East Africa.

These people are called *Galla* by almost all foreigners. The word means "wanderer," or, more literally, "going and coming." They say the coast tribes first gave them the name. They would have heard it from the Arabs, who, no doubt, got it from Abyssinia. They call themselves *Orm* or *Orma*, signifying "free," and their country *Laf Ormati*. Though to-day a mere handful, about 5,000 in all, they are found scattered over an area extending from the mouth of the Juba, on the north, to the Sabaki, on the south, north-eastward as far as the Lorian swamp, and westward to the falls of Kenya and Ukambani. The Somali adjoin them in the region of the Juba, and the Giryama on the south.

The Barareta, or Southern Galla, of to-day are settled on both sides of the Tana River, scattered in small communities, scarcely one of which consists of more than 100 persons. In the Malindi district, near Mambrui, there are some 200; the place where they reside is called Boma Upande.

In 1913, the nearest Galla to Mambrui were living at Kurawa, a two days' journey to the north. They had left Boma Upande some years before.

On the Sabaki River nothing now remains but place-names, which are clearly of Galla origin. At one time the Galla were forced to retreat before an invading party of Masai, and for several years the greater part of them dwelt in the neighbourhood of the Sabaki, but when I travelled up it as far as the borders of the Kamba country I did not see even one.

From Mambrui, or Boma Upande, north to Golbanti is some three or four days' journey, and on the way there are various settlements, containing, in all, some 150 Galla. Between Golbanti and the coast there are no Galla along the course of the Tana, but at and near Witu there are some 250, and at Mkunumbi, on the land route to Lamu, about 100 more, who are professed Muhammadans. In Lamu there is a small settlement of 30 or so, who are shepherds to the Swahili of that town. On the coast-line between Lamu and Kismayu there is a further settlement, some 150 strong, escaped slaves of the Somali, who had captured them in war. This is the extent of the Galla population in the strip of land running parallel with the coast to the north-east and south-west of Golbanti, amounting to not more than 1,000 all told.

We must, then, seek our numbers inland. The Tana valley is occupied by the Wa-Pokomo, a fine tribe of cultivators of the negro type, strong and well-built—harmless people in every way, and, at one time, in a state of vassalage to the Galla. According to a census taken by Mr. J. J. Anderson, when District Officer, they number between 15,000 and 16,000, and are increasing rapidly. But our attention must be directed to the Galla population.

I have visited every town, village, and hamlet in the country, as far up the river as Makere, and could not find that there were more than 1,000 Galla, including those at Golbanti. The remainder are higher up country, which I visited later. The Government reports estimate the number of Galla in the southern region at not more than 5,000. If former reports are correct, what has become of the people of the last two generations? Many, I know, are in Somaliland and among the Masai, but their numbers have been greatly exaggerated, and it will probably be found that the regions beyond do not contain so many as has been thought.

The Galla are, without doubt, a superior people, and conscious of superiority,

for their pride is unbounded. Personally, I have received nothing at their hands except kindness. They have made no excessive demands on my purse, but, on the contrary, have been liberal in the extreme, usually welcoming the traveller with a presentation of sheep, goats, and milk—enough, sometimes, to supply the wants of more than twenty people. I shall revert, later on, to their beautiful custom of hospitality, which had, to some extent, fallen into disuse (since, as they said, “strangers”—meaning more especially raiders—“do not consider us”), but is now reviving again. Their religion teaches them to care for strangers bound on an errand of peace, so that their existence in the land of shadows may be the brighter for a record of good deeds.

TRADITIONS.

There is not the slightest doubt that the Southern Galla are a branch of the great family who now reside towards the north, or in what is called Boranaland. They say that they formerly dwelt there, together with their brethren, in peace and prosperity. They multiplied greatly, lived on the flesh of cattle, sheep, and goats, and drank milk and blood. The art of tilling the soil was unknown—in fact, they had no need of it, since their herds and flocks provided them not only with food, but with skins for beds and clothing. Besides the above animals, they had abundance of camels, horses, and asses.

The following is the account given of their separation: Shora Tabdu, the reigning king, had a foster-brother, Bierami Higu, who, though of servile birth, had been manumitted and became a trusted and respected councillor, showing much greater intellectual capacity than the king himself. At a time when a severe famine prevailed, Bierami Higu sent out a party to ascertain the state of the country to the south. They returned, stating that rain had fallen there, and grass and water were abundant. Bierami proposed that the tribe should migrate thither, and, calling together all who cared to join him, set out at the head of a large party, finding, as had been reported, grass and water in plenty, in the region of the Lorian swamp, where they made a settlement. Bierami Higu, considering himself indispensable, left word with his foster-brother to look after the country in his absence, adding, “If need for my help arise, send for me at once, and I will return.” Shora, who had no desire to share the supreme power with him, sent various messages to the effect that all was going on well, so Bierami never returned, and a peaceful division of the tribe was effected.

The settlement at Lorian does not appear to have been permanent—indeed, it would have been impossible to remain there during the wet season, as the whole neighbourhood is bog and morass. Bierami Higu and his people moved on to the south-east and took up their position in the region between the Juba and the Tana. No further division taking place, they were called simply “Galla” or “Kofira” Galla and lived in peace without any sort of communication with the Borana country.

Godana’s people at Mkonumbi are Kofira, as also some of the Galla at Witu; the rest of those at Witu, and those at Kurawa are Barareta.

It does not seem to be the case nowadays that there is no communication with the Borana—at least I met a Borana man and his wife at Kurawa in 1913. Bierami Higu, who enjoyed the full confidence of the people, was acknowledged by all of them as their king, or supreme chief; but at a later date they scattered abroad and settled in families, each having its own head as chief.

Another account is as follows: The head of one family, Kuyu Balali, was a man of great strength and stature, had a skin covered with hair like a horse, and was double-jointed. He possessed the largest spear ever seen, and his shield was as large as a huge door (this comparison is always used in telling the story, but actually, the

normal door of a Galla hut would be too small to serve as an illustration). He lived in a town alone with his wife and children and enormous herds of cattle. Shora Tabdu, of Boranaland, coveted Kuyu Balali's riches, and, still more, his wife, who was



FIG. 4.—MIN NAGESA—THE HOUSE OF THE DEAD.

a handsome woman and somewhat disposed to encourage Shora's advances. The latter, after a formal greeting, challenged Kuyu to fight, but Kuyu, who was a man of peace, only laughed, declining to believe that he was serious. Shora, however, loosed Kuyu's cattle and did everything he could to anger him. Kuyu was roused at last; the beating of his heart could be heard like thunder, and when again asked if he would fight he said he would do so if a man could be found. Shora, having come to a secret understanding with Kuyu's wife, came on the following day to visit him, leaving a number of his followers in ambush outside the town. Kuyu, it is said, greeted Shora on his arrival, and then took his seat as usual and gave instructions for the calves to be put with the cows. When he turned round his seat broke, and he fell to the ground, whereupon his wife seized him and Shora killed him instantly, and escaped with the woman to his own camp.

This story seems to refer to an earlier separation than the one



FIG. 6.—TYPICAL GALLA HOUSE.

above described as occurring in consequence of the famine.

GOVERNMENT.

The people are divided into sections called *Lub*, or clans. *Lub* really means "followers of a king." The government was formed after a separation from the

main tribe called "Hayum" kingdom. Over each *Lub* a ruler was appointed called *Hayu*, i.e., king. This ruler was nominated along with a regent or prime minister, who is called a lower king. The nomination takes place previous to election. The appointment rests with the head of every family who has himself passed through the ordeal of initiation. He may almost be said to go by succession or by family. The first family or the family of most importance made a ruler, and thus it follows by rotation throughout the *Lub*. Females may not succeed, it rests only with the males. Minors may be appointed to rule, and his probable successor will belong to the next family. The country is divided into two sections; each section is named *Gos*, or "united people." These again are divided into sections named *Lub*. Over each clan a ruler is appointed by family, i.e., in a clan there may be five families or more, including every blood relation. The first family and the first of that family is king (*Hayu*) along with a second of the same household. Thus the second family and so until all have been represented, and then it goes to the first; in this way the succession is kept up and the successor is well known. His power is absolute after his coronation, which is called *Gaduoma*, or "a state of subjection."

The coronation ceremony consists of a huge feast; the number of cattle traditionally spoken of is 200. These are slaughtered and much wine is consumed. The feast lasts a month or more. This, of course, means that the king presumptive must have a large stock of cattle. After this feast the king takes authority; he has put his people into a state of subjection, received their homage, appointed them their offices and functions, and allocated their pieces of territory to occupy and defend. He exercises his power in conjunction with his colleague and those appointed to help as ministers. His power is not despotic, it is paternal, and the kindest feelings prevail among king and subjects. He is exempt from war service, and tended with affectionate care. Although having absolute power, if it is abused, he can, by consent of the people, be deposed. His reign lasts for eight years only. The people are well affected to his rule. The present system has not been maintained for an indefinite period; it is of late origin. Tradition speaks of two sections only, and after their separation from the mother country, they, in their wanderings over a vast territory, felt the need of a new system, the present being the one adopted. The sole reason given for the present system is that, having so many small settlements extending over so vast a territory, it became imperative that the old system of *Gos* rulership should be altered to that of *Lub*. The system works well.

The petty chiefs act in conjunction with the king. These are, however, appointed by election of officers called *Toib* or *Toibi* (= seven councillors or ministers). These are men of standing and character in the *Lub* or clan. They are governed by, and work in unison with, the head. These officers are appointed by the king, and each of the seven has an alternative, so that the number is unbroken. Their office is to sit in council with the king, hear cases, administer justice, and in the king's absence they can pass sentence in minor cases; but all they do is done by his authority. For all that, this may act as a check if the king inclines to despotism. There is no such thing as favouritism; the *Toibi* stands in the order elected: 1, 2, &c. The first must call together the council, and must proclaim the king's decrees. The ruling seems to be simple yet effective, and there is no elaborate machinery of government. There is an established constitution, and some laws of a high order of merit. Women have no voice in any State matter. The revenue is composed of duty or percentage on ivory taken by aliens from the country. Cases of judgment are subject to a fine, levied in the shape of cattle, which are usually slaughtered and eaten by the king and his ministers. If the king cannot raise his coronation feast, every family pays a proportionate quantity; in fact, all ceremonies connected with the headship are provided for by the people if need be, although the

head aims at defraying the needed expenditure, in order to gain the full homage of his people.

There are no feasts, annual or otherwise, for payment of tribute.

J. H. PHILLIPSON.

New Zealand: Ethnography.

Balfour.

**Origin and Relationship of Hani, Tewha-Tewha, and Pou-
Whenua.** By H. Balfour, M.A.

108

In Mr. Skinner's interesting note on the origin of the *hani*, *tewha-tewha* and *pou-whenua* (MAN, 1916, 97), I observed that a certain long, sharp-edged paddle-club, which is represented in Fig. 8, is described as "Rarotongan." One would much like to know the evidence upon which the assignment of this specimen to Rarotonga is based. The club appears to me to be very unlike any examples from this East Polynesian island of which I have any knowledge, whereas it corresponds, even to the smallest detail, with a form of club which is well known in Savage Island (Niué), and which I have always regarded as peculiar to the latter island. The distance between the two islands is a matter of 10 degrees of longitude, and if this club can be proved to hail from Rarotonga, the perfect identity which it exhibits with the familiar Niuéan type (down to the finely-engraved network pattern on the pointed butt below the stop) would be even more noteworthy than the *relatively* slight resemblance which it bears to the *hani* and *pou-whenua* of New Zealand. The point seems to be worth clearing up, since some 600 miles lie between Rarotonga and Niué, and the certain localization of the specimen has a bearing upon Mr. Skinner's argument, on account of the possibly Melanesian affinities which have been noted among some of the natives of Niué, where the Polynesian ethnic element prevails.

HENRY BALFOUR.

New Zealand: Ethnography.

Skinner.

**Origin and Relationship of Hani, Tewha-Tewha, and Pou-
Whenua.** By H. D. Skinner.

109

The mistake is, of course, as obvious as any mistake can be. The writer must plead that the paper was written in a military fever hospital, and that the different types of club were described from memory. The illustrations were secured after discharge from hospital. Finally, the correction of proofs had to be rushed into a few minutes, and the mistake was overlooked. The nine club happens, ironically enough, to be the weapon with which the writer has been most familiar from the beginning of his studies in the Pacific.

The correction, as Mr. Balfour indicates, only strengthens the main contention of the paper.

H. D. SKINNER.

Polynesia: Linguistics.

Brown.

Remarks on Samoan Sound Changes. By Rev. George Brown, D.D.

110

In MAN, 1916, 28, Mr. A. M. Hocart directs attention to a comparatively recent, and, in my opinion, a very regrettable change in the pronunciation by the Samoans of certain letters in their language, and as I have had an intimate acquaintance with the Samoans for more than fifty-five years, I can give a little information on the history of the change, though I cannot suggest any adequate reason for its adoption.

I resided in Samoa during the years 1860 to 1874 without a break, and I have visited the group many times since the latter date. My last visit was in June last (1915), and on that occasion I went to every district on Savaii and to most of the districts on Upolu.

When I first resided in the group, in 1860, there were very few people indeed on Upolu, and still fewer, if any at all, on Savaii who used the "k" sound. It was very rarely heard outside of the Port of Apia and the Tuamasaga district.

The general opinion was that the change was introduced from the island of Tutuila, and it was certainly called *O le nanu fau-Tutuila* (Tutuila jabber, or wrong speech). Whether it originated on Tutuila or not I cannot say. Some individuals seemed to be conscious of their wrong pronunciation. One man tried to excuse himself by saying that his mouth was hard. The spread of the change was very gradual, and I am inclined to believe that intercourse with white men hastened the progress of it, for many of the traders used the pronunciation.

There are some points connected with this innovation which may be noticed :—

1. According to the testimony of the natives the sound of "k" was not heard in the Samoan language, except, it may be, in a very few individual cases, prior to the years 1858-60.

2. It was said to have originated in Tutuila, but none of the individuals whom I knew in the early sixties, who used the objectionable pronunciation, had ever been to Tutuila, from where the *nanu* (jabber) was said to have come. The worst case which I knew was that of a native of Manono. I do not remember hearing it on Savaii, except in a very few instances, or from visitors, whilst I was resident on that island. It certainly was not frequently used.

3. The sound of "k" is not in the original Samoan. I have a volume of *Songs, Stories, Proverbs, Riddles, &c.*, written by a Samoan poet during the years 1862-66. The writer had no communication with any white man, and the only instruction which he received from me was that he was to write, in his own time and in his own way, anything which he thought I would like to know. The book contains 500 foolscap pages of closely written matter, and there is not a "k" in any one of them. The value of the book is acknowledged by the late Rev. G. Pratt, in the preface to the third edition (1892) of his grammar and dictionary, in the following words: "From a volume of MS. songs, written by a native poet, and lent me by the Rev. G. Brown, I culled 500 new words."

4. I do not remember hearing, even on my last visit eleven months ago, any *Tulafale* (orator) or chief, when speaking at a *fono* or other public meeting, using any but the proper pronunciation. They may have done so, but I think I should have noticed it.

5. A peculiarity with regard to many of those who used the "k" sound was that if they had to speak or read an introduced word which contained the letter, they nearly always altered the sound to that of "t," e.g., *Kitiona* (Gideon) was often pronounced *Titiona*.

6. One of the most interesting facts about this "k" sound is that there has been no attempt to introduce it into the causative, or other words which contain the "break," or click, marked by an inverted comma. The "break," which Pratt says stands "for the dropping out of a consonant, usually 'k,'" most certainly represents a true sound, but it is at all events an open question whether the Samoan is not the original form, and the displacement of the "break" by the "k" in other languages a later innovation. I have noticed this same difference in other Melanesian and Polynesian languages. If, as Pratt says, the "break" represents the dropping of the "k," it is singular that there is no attempt to replace the sound in the words from which it was dropped. The causative *fa'a* in Samoan becomes *faka* in Tongan, *vaka* in Fijian, *whaka* in Maori, and in many other languages the cognate form containing the "k" sound is used, but the Samoans, though they change the sound of "t" to that of "k" in some words, never attempt to introduce it in the place of the "break."

I sincerely hope that the fact that the "k" is not recognised in any of the literature of the group, nor used by the official speakers and chiefs, will preserve the beautiful Samoan language from the threatened deterioration. GEO. BROWN.

Anthropology.

Fleure.

Photographs of Welsh Anthropological Types. By H. J. Fleure.

111

A collection of 59 illustrations of Welsh Baptist Ministers of date about 1860-1865 was studied anthropologically by Dr. John Beddoe and his friend and fellow-worker, Dr. Davis, of Bristol, and of Aberceri, near Newcastle Emlyn, Cardiganshire. They have been given to the Royal Anthropological Institute by Mr. and Mrs. N. G. Heaven. Mrs. Heaven is the daughter of the late Dr. Davies.

Each illustration is mounted on a card, and on the back of the card is recorded the opinion of these anthropologists as to the type of the person figured. The terms used are, in general, those of Broca, but it is interesting to notice that the types chiefly distinguished are those which more recent workers also distinguish, thus establishing still more clearly the extent to which Dr. Beddoe was a pioneer.

Two are called "Pure Basque," and are obviously of Mediterranean type, with that admixture of some old strain which has been noted in a "Plynlymon type" in a recent paper (*Journ. Roy. Anthr. Inst.*, Vol. XLVI, 1916, p. 35ff.) The eyebrows are rugged and the eyes deep set. The narrow forehead recedes markedly from the front and sides, and in one of the illustrations the zygomatic arches are very strong. Several are labelled "Basque," and are generally of what several workers would call the Mediterranean type, with foreheads not receding markedly, and chins sometimes not at all prominent. Three are called "Basque and Modern Irish," and are again of Mediterranean type, but of a rather bony variety of that type. A number again are called "Basque and Kymric," and most of them seem to have rather more finely contoured faces, with forehead often high and nose usually straight and fine.

The "Kymric types" seem to have been identified mainly from the great length of the face beneath a high and fairly narrow head. The facial contours are refined, the nose strong and straight, the head not broad. The illustrations do not vary much for the identification of the colouring, so it is difficult to say whether we should consider these men a variant of the Nordic type; the strength of the jaw associated by some workers with Nordics is not conspicuous here.

The "Bronze types" as labelled are what many now call the "Beaker-maker type," i.e., men with broad heads, strong brows, wide faces, lower jaws somewhat rounded, not too strong but having an angle not very far removed from a right angle between the jaw and its ascending ramus. The terms "Bronze and Kymric" and "Kymric and Bronze" are used to describe a large proportion of the total; the former version is used when the head appears broader and the face more rounded. One notices the number of men of this type, that is, approximating to what it is now customary to call the "Beaker-maker type," though with more refined contours than the majority of individuals found in Bronze Age and Beaker sepulchres. The type is not numerically very strong in the actual population, and it is doubtful whether it would be found in anything approaching the same proportion in a collection of modern ministers. The reason is probably an interesting one; while the Welsh language was still artificially repressed and while freedom of conscience was still non-existent at the historic Universities, and the new Universities were not yet founded, the natural leaders of the Welsh people tended to look to the ministry of the Nonconformist bodies as a channel of expression. The varieties of the Beaker-maker type seem to work up into the "leader" group in most British populations

in considerable proportion, and this is probably why we find them a conspicuous element here.

Others are labelled "Saxon" and seem to have rather small long heads, while those called "Kymric and Saxon" are somewhat broader, generally bigger featured. One of the "Saxons" would be described by some workers to-day as a typical small-headed Nordic. One or two have the term "Celt" applied to them in the continental sense, and they approximate to the "Broad-headed Dark Type" of the Welsh coast, but they are not numerous in this sample. They are not a numerous element in the chief districts in which the Welsh Baptists are a large element.

The whole collection should be of interest to anthropologists, present and future, and it should be supplemented by the collection of as many of Dr. Beddoe's photographs and lantern slides as possible in order to make a reference set of a comprehensive kind at the Royal Anthropological Institute. Such a collection, carefully dated, would be of much value to students in future generations. Six of the illustrations from this collection are given in Plate V of the paper cited earlier in this note. Thanks are due to Principal Roberts, of the University College of Wales, and to Rev. George Williams, for notes and information adding to the interest of the collection.

H. J. FLEURE.

Africa, West: Sierra Leone.

Migeod.

Mende Songs. By F. W. H. Migeod.

112

PRELIMINARY NOTE.

The Mende nation inhabits the British Colony of Sierra Leone. The following songs are part of a collection I have made from natives belonging to different parts of the country.

To obtain an adequate translation of a song is usually a very difficult matter, and I have been obliged to omit a considerable number of the more unintelligible. It is, in the first place, not easy to recognise the words of a song, even in one's own language, when heard for the first time. In a foreign language, and especially in an African language, the difficulty is all the greater. Words are often slightly modified in pronunciation as well as shortened, and a further complication is that the singer is himself very commonly unable to give a meaning, not only to single words but to whole lines. The singer, if he does not frankly admit he does not know the meaning, will give a version, while one of the audience will say something quite different. The many meaningless words they will describe as "song-words," and there their information ends. For this reason the songs of one part of the country may be quite unintelligible in another part. The meaning has to be explained, although the difference in the dialect may be quite insignificant.

I may state that personally I have rarely succeeded in understanding a song until it had been explained to me, and I could get it down in writing to study at leisure. A considerable drawback to such studies is that the singers can rarely be made to say the words in an ordinary tone of voice. They almost invariably have to sing them; and I may add incidentally that it is fatiguing to have songs bawled at one, usually indoors, at the top of the singer's voice, and repeated over and over again until one can get them written down fairly accurately.

The allusions to native customs and ceremonies, and to animals, are, of course, obscure to any but the natives themselves. To understand them requires a very competent local knowledge.

One grammatical note must be added. It will be noticed that the vowel sounds "e" and "o," varied sometimes to "ye" and "yo" after "i," often follow words standing at the end of a phrase. This is a common feature of the language,

especially when calling to a person in the distance. In the songs these vocal additions are necessary to complete the rhythm.

1.

Ki wai wai, ki wai-o,
Nya nde, nya nde wai,
Ngi le gbe wo.

Repeated.

Ki wai wai, ki wai-o,
My brother, my big brother,
His birth was long ago.

A Poro song.

Poro is the great so-called secret society of the Mende nation. It is for men only. The rites are performed in the bush.

The words in the first line were described as "song-words" and said to have no meaning, though this is doubtful. Without knowing the allusion the song becomes completely meaningless.

It is said to be sung to gather everybody together when they come out of the "Poro bush."

2.

Gbe-yo! ma gbe-yo, ye.
Ndeve i ya hema-o.

Disperse! We disperse (or, leave).
The bat has gone to hang up.

This is a Poro song when leaving.

Meaning as supplied by the singer: There is a mat hung at the entrance of the "Poro bush." A man brings a present (*samba*) to the Spirit. When obliterated it is called "Gbogbo." The giver then goes home, and the Spirit also goes away. Hence they say the bat has gone to hang up.

3.

Nyahei! be fo kamela.
I le a mia we.
Jembe lenga.
A mu le ngalui ma njego.

Woman! you must not enter the Poro bush.
She passes yonder side.
?Towards the horizon.
Let us pass by the moonlight upstream.

A Poro song.

4.

Ai Majiajo!
Ba nya lukpe, koli be wa bu.
Ngi koli hugo-o.

Ah! Majiajo!
Do not push me, leopard you cannot come in.
I know the leopard well.

Majiajo—Name given to the performer of a certain dance.

A dance song.

5.

Ba dundui ji hu lawo.
Be kuna nya woma lo.
Nge ye ge sao.
Ndopo, bi nde ti nya la ge.
Gbe! gbe!
Semolui lo.
Ba nya la ge.

We open out for this dance.
You say in future I am behind.
I said just now, no!
Boy, you say they call my name.
Stop! stop!
It is the dance leader.
Do not mention my name.

A dance song.

Translation of first line doubtful.

Dundui is said to be a dance at night after the Poro image has left the town.

Semolui is the designation of the performer of a Poro dance.

Explanation supplied in "English." "A man dance and finish. He want to go to him town, and take up him load for go. Some one see this and tell him to stop. He say no."

Wai wai kimbo.
Wai wai, ngi benga.
Njoso, Ngi benga.

This is described as a *Njoso wuli*, or magic dance song.

A! i gbeli, Manjo!
Ndalogbiame, fama, fama.
Lumbi-o, yo, o, yo.
Bi nya bama na, hiye.

This is a plaint of the dancer, or performer, who has not received an adequate present on going away.

Manjo is said to be the leader in a Poro dance.

Lumbi is the name given to a drummer who plays the *sangba*.

Balemoi-o!
Balemo belingoi gba!
Balemoi-o!

6.
Scatter, scatter, cricket!
Scatter, scatter, I am undressed.
Magic dancers! I am undressed.

7.

Ah! he shakes, the dancer.
The parting gift, a shake hands, a shake hands.
Lumbi, oh, oh.
You are killing me there, are you not?

8.

Music player!
Most skilled music player!
Music player!

A dance song.

Ba is an instrument made of calabashes with notes that are struck.

Gbama! tindo!
Gbama! tindo!
Gbama! tindo!
Hua gbo wai-e,
Wai-e, wa.

9.
It is no use, Tindo!
It is no use, Tindo!
It is no use, Tindo!
} Big, big red bush-cow.

A hunting song.

Tindo is a small bird, and the hunter's confidant. It means he failed to bag the buffalo.

Mu yama woma-o,
Sukobondo!
Dogboi i nyani kamaso ma.
Mu yama woma-o,
Ndiamo!

10.
Let us return,
Sukobondo!
The bush is spoilt for the hunter.
Let us return,
Friend!

A hunting song.

Sukobondo—A personage connected with some ritual. Very commonly used as an ejaculation.

A mu yama Njama-o.
Oh! mu yama Njama, o, o, o.
O Yumbe wa-o, o, o.
Oh! mu yama Njama-o.

11.
Let us return to Njama.
Oh! let us return to Njama.
O Yumbe come.
Oh! let us return to Njama.

A home-sick song.

Njama—Name of some town.

Yumbe—A man's name.

This is an improvisation, and the names could readily be changed.

Ho! nene lo,
Bawuiya, Bandajuma.
Bi gbe wo-o Bawuiya.

12.
Oh! they are delightful,
Bawuiya and Bandajuma.
You were at Bawuiya very long ago.

A home-sick song.

Bono ! keiye !
Keiye ! Bono !
Gbe mu guli jia ga-o.

13.
Bono ! bandy-legs !
Bandy legs ! Bono !
Let us walk quickly apeliike.

A skipping song.

Bono = "Bondo," a man's name.

A winde mahu panda-o.
Ngeyei i bulema.

14.
Jump over it properly (plural).
The rope is not splitting.

A skipping song.

The rope is always a cane, and if it splits it is no good. The rope is not swung high as in English skipping. Two men squat down and turn it.

Gbo bi lembi a yima-o ?
Te wo, te, kpakpae gbama.

15.
Why are you such a time in stooping down ?
They long ago said the "kpakpa" fetish is worthless.

Gbo bi lembia ?
A mu velima-o, e, ye.

What did you wait for ?
We say good-bye to you.

A skipping song.

Kpakpa is a protective "medicine," either for a town against sickness, or a person against some mishap.

Nyine ! Nyine ! tondo nyine !
Bao yo yo yo.
Gboso gula kolima-o.
Bao yo yo yo.

16.
Rat ! Rat ! Common house rat !
Help me, oh (help me).
The trap falls on the leopard.
Help me, oh (help me).

A skipping song.

This means the small man may sneak in under like a rat, but the rope catches the big man like the beam falling on a leopard in a trap.

Foli gbi i le.
Foli waon.

17.
There is no sun there.
Clear sunlight.

A skipping song.

This refers to the rope being turned so as not to leave a space one moment, but the next turn gives a clear opening.

Nge gbua a kpindi hu, lo'nya va.

18.
I cannot go out at night, I have a swelling
(in the throat)

Ke i lo nya ma, e, ye.
Lo'e bua nya boli.

And it remains on me.
The swelling has come out of my throat.

A skipping song.

This seems to mean that the dancer says he has something the matter with him, in case he should fail to get through. He gets through and says he is all right.

The translation is very doubtful. I do not feel at all sure that the singer explained the meaning accurately.

Kpendi bei, jianji.
A ombo ! ngi na hugo.

19.
Stunted rice, ?—.
Alas, I do not understand that.

A skipping song.

Stunted rice—seems used as a term of reproach.

Bo-konde-o, Bo!
Bo i ya lumai nde-o.

20.

Giant snail! Giant snail!
The giant snail has not agreed yet.

Said to be a war song.

Gbowo-konde ("Bo" for short) is the great edible snail.

Bombo tu'
Ko lopo!
Ta bombo male
Peli nga ndema.
Bombo tu' i.

21.

Call the stout man!
War-boys!
They meet the stout man
At the cross roads.
Call the stout man.

Peli nga ndema is a specially appointed place at the cross roads where the Kogugba, the war chief, meets his followers.

22.

Bembe nga-o.
Li ange waili wa hu.

Wave it around aloft.
Go with me to the big shady place under
the trees.

A love song.

First line obscure. *Waili* is a cleared sitting place under a tree.

23.

Nomo a mba le Mande hu a folo.

A man with craw-craw must not cut rice in
the Mende country in the sun.

Gbendo nga i be.

Wait till the scab dries.

Nomo = *Nowo-mo*. *Nowo* is an eruptive skin disease called "craw-craw."

24.

Mu de gbei ge njei gbayango.

We passed a short time ago, the water was
strong.

Mu ye gbei fombui leke.

We descended at the time of the rapids.

A boat song.

25.

Guri be, guri be.
Lo njahu mia.
Guri yakpe mu li.

Paddle here, paddle here.
Put it in the water yonder.
Only one paddle (but) we go (with it).

A boat song.

26.

Hani lo a kpukpule bo.
Bi toa?

Something is dropping its dung.
You see it?

Repeated.

27.

Bo kpa wai-o,
Mandambi jongo.
Ba ngiyei nde,
Bi nya mawulo
Ngi ja a bi gbotoi.

Ah! the distance between us is great,
As long as the great forest vine.
Do not climb the hill,
Wait for me,
(Until) I (can) touch your backside.

This refers to closing up the column when walking in single file.

28.

Ndondo! nga gule gbe nyama.

Cease! I am looking at the cloth I am
wearing.

Jong, yo-e.

Well done.

Ngului bonani-o.
 Kamala wului.
 Bonani-o.
 Bewo.

29.
 The stick is straight.
 The stick is (good) for the Poro house.
 It is straight.
 It is a "bewo" stick.

Kamala is the place where the Pore rites are celebrated. *Bewo* is a tree.

A! wunge, wunge-e.
 Hamboi ya wova.
 Ngombui nya li houa.
 Ah! wunge, wunge.

30.
 Ah! Wunge, Wunge!
 The grid has become old.
 The fire has seized my heart.
 Ah! Wunge, Wunge!

Wunge is said to be something like a cricket. *Hambo* is a wooden grid for drying fish or rice either in the sun or over a fire.

Jeje! Bondo!
 Mani gogo gbia-o.
 Gogo gbia-o.
 Ngi nya gomi gbia-o, ngi wa.

31.
 Squirrel! Bondo!
 Pull out the fibre of the palm frond.
 Pull out the fibre.
 I hunch my back, I come.

Bondo is a man's name. *Gomi* is the part of the back between the shoulder blades. In dancing it is worked in and out.

Jangba, ma-be-o.
 Bi nya gbama, jaga auge-o.

32.
 Drum, you and I.
 You are holding me, Walk quickly with me.

O ya! e! Jondo!

Oh grip tight!

Nga lua wunde ma-o;
 Ngombu-o.
 Nga lua-o-e.

33.
 I do not fear the fire brick;
 O fire.
 I do not fear it.

Nja nwoni, kin nwoni-o!
 Nja nwoni, kin nwoni-o!
 Nwoni a yia bondo, kenye, kenye.

34.
 Water-bird, "king"-bird!
 Water-bird, "king"-bird!
 The bird speaks in the Bundu bush, "kenye,"
 "kenye!"

Ki bo.
 I jia, lele, le-o, le-o, le-o, le.
 Nwoni i yia bondo.
 I jia lele, le-o, le.
 Nwoni a li jale.
 I jia.
 Jale jia.
 He! mu ya-o,
 Mu wa, ma gola tei ma-o, e, ye-o.
 Mu wa-o-e,
 Mu wa,
 A! jekende, nwe-e,
 O ya! jekende, nwe-e.

?
 He walks, slowly, slowly, slowly.
 The bird speaks in the Bundu bush.
 He walks slowly, slowly, slowly.
 The bird goes quickly.
 He walks.
 He walks quickly.
 He! we are going,
 We come, we surprise the town.
 We come, we come,
 We come,
 Ah! Red-crab, for sure,
 Ah! Red-crab, for sure.

Bundu is the female secret society of the Mende. *Kenye* apparently represents the bird's note. I could get no explanation as to the precise bird that bears the name *kin nwoni*.

Gbe mia bi kpokpo mbu?

O lumbo, dumbe pene.

Pene nana kpwiti nje a la(k)pa.

Gbe lapa? Lapa kolu.

Gbe kolu? Kolumbe (= kolu lumbe).

Gbe lungbwe? Lungbwe dia.

Gbe dia? Dia konde.

Gbe konde? Konde lui.

Gbe lui? Lue pete.

Gbe pete? Pete kao.

Gbe kao? Kao membu.

Gbe membu? Membu simbi.

Gbe simbi? Simbi kowe.

Gbe kowe? Kuwe bamba.

Gbe bamba? Bamba hu nya.

Gbe nya? Nya tupu.

Tupu a bwa gahu i bure nje ya gbaiye.

Gbe gbaiye? Gbaiye ndili.

Gbe ndili? Ndili, ho-o-o-o-o.

This song is sung by two persons; one asks the question, the other gives the answer, usually from a distance. Every syllable is very clearly enunciated. I could get no translation, and many words were stated to be merely "song-words."

The song runs on lines something like the following:—

What house? A house boat.

What boat? A boat race.

What race? A race horse.

What horse? A horse pond.

A much better example would, however, be given in English by reversing the words, as:—

What iron? A flat iron.

What flat? A mud flat.

What mud? Swamp mud.

What swamp? A snipe swamp.

What snipe? A snippet.

What snippet? A newspaper snippet.

36.

Nyagwa, Nyagwa, kokeanie.

A call on a horn.

Nyagwa was a chief's name.

Said to mean Nyagwa! Nyagwa! what is the matter?

37.

Mwamwa i wua nya ma.

? Fear enters me.

A call on a horn.

Some said *gbua* for *wua*, thus meaning "Fear goes out of me."

38.

Kokande, kokande, ba lima, hoe? Kokande! Kokande! are you going then?

A call on a horn.

Kokande is either the personal name of a brave warrior or a designation of such a man.

39.

Frafra goja ! Ti wa ka, ka, ka. Ti They come in a multitude. How many ?
 lole ? Ti fere kpe. Frafra goja ! Only two.

A call on a horn.

Meaning of *Frafra goja* uncertain. The call means, however many the enemy may actually be, they are only equal to two good men. F. W. H. MIGEOD.

REVIEWS.

Prehistoric Art.

Parkyn.

An Introduction to the Study of Prehistoric Art. By Ernest A. Parkyn, **113**
 M.A. London : Longmans, Green & Co. 1915.

An apology is due to Mr. Parkyn for the delay in reviewing this book, for which the present writer is not responsible. A delay of this kind is, however, not very serious, as many complimentary reviews of the book appeared soon after its publication, and a belated one serves to remind the public of its existence. The present writer is pleased to have an excuse for once more making himself acquainted with a work that deserves to be read and re-read.

More than a third of the book is devoted to a consideration of the Palæolithic Age, nor will the reader find this too long ; the subject is a fascinating one, and for the first time a general presentation of the facts is made, which gives a much clearer view than could be gained by reading the very extensive French literature on the subject. Although the author has previously figured some of the older Palæolithic implements, a reference to them is omitted in his *Chronology of a Palæolithic Period*, which deals solely with the Upper Palæolithic cultures ; the relation between the two divisions might have been made a little clearer for the non-expert reader. The suggestion made by the Abbé Breuil that the Solutrians were a steppe folk who burst into Western Europe might have been alluded to, as it accounts for a lack of cultural continuity.

Mr. Parkyn gives the essential characteristics of the relatively uninteresting decorative art of the Neolithic Age, though, as he points out, it was a period of great activity and general all-round advance in culture. The arts and crafts of the Bronze and Iron Ages are dealt with at considerable length, more especially that wonderful development of late La Tène culture in the British Islands to which the name of "Late Keltic" is usually applied in this country. The prominence which Mr. Parkyn gives to this art is well deserved, as it shows that the barbarians of the north-western islands of Europe had at that time an artistic aptitude which was superior to that of their neighbours on the mainland. Mr. Parkyn in his all too short last chapter discusses the origin of Late Keltic ornament, and here as elsewhere he proceeds cautiously, but arrives at the conclusion "that Late Keltic ornament owed its origin to several influences (still to be clearly defined) from the East and South, which Keltic genius absorbed and transformed into a style of its own, of characteristic individuality and beauty, the highest expression of which is seen in the British Isles." The data supplied by this book again and again demonstrates that arts and crafts wander afar, that cultural spontaneous generation and parthenogenesis do not occur, and that a linkage of cultures is universal.

Mr. Parkyn, at much labour to himself, has done a great service in collecting and carefully arranging the material for his book. The very numerous illustrations add greatly to the value of the text, as they are well chosen and admirably reproduced—may it be permitted to protest, however, against the mutilation of Fig. 91 ! The copious footnotes give the reader the opportunity to consult the sources from which Mr. Parkyn has culled so circumspectly. A. C. HADDON.

Egypt: Archæology.

Blackman.

The Rock Tombs of Meir. By A. M. Blackman, M.A. Part I: *The Tomb-Chapel of Ukh-Hotp's Son Senbi.* With 32 Plates and Frontispiece. **114**
 Part II: *The Tomb-Chapel of Senbi's Son Ukh-Hotp* (B. No. 2). With two Appendices on Hieroglyphs and other Details in B. Nos. 1, 2, 4. With 35 Plates.

This important group of sculptured and decorated tombs is published under the auspices of the Archæological Survey of Egypt, a society to which all students of ancient Egypt owe a debt of gratitude for publishing monuments which are likely to be destroyed. In this instance the debt is very marked, for it is only necessary to read Mr. Blackman's account of the destruction, in modern times, of these beautiful tombs, to realise how important it is to save all that is possible. For in archæology what is once lost is lost for ever and can never be replaced.

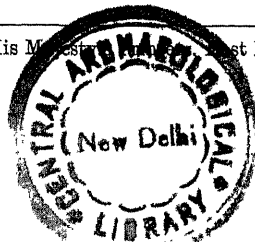
These two volumes give a careful and detailed study of the two tombs; the scenes are copied in outline, and the more important details are also illustrated by photography. The scale on which the scenes are published, both outline and photographs, are of an adequate size for those details to be seen clearly. Apart from the artistic value of the drawing and sculpture, which is of a very high order, the scenes are full of interest for the Egyptologist and the anthropologist. Mr. Blackman describes everything in detail and with the utmost care, and translates all the inscriptions, including the short conversational remarks, with which the scenes of daily life are always plentifully besprinkled. In this connection it is interesting to find the local "swear-word"; in the bull-fight scene, one of the herdsmen, who is trying to separate the bulls, shouts, "Let go! Great Ukh! let go!" the Ukh being the fetish or emblem of the local goddess, Hathor.

The emblem or crest of Cusæ—the ancient name of that district—is a man holding a snake-necked leopard in each hand. These snake-necked leopards are shown on two of the slate palettes of the late prehistoric period; on one they occur with the earliest known representation of Hathor, a woman's head with cow's ears and horns; on the other they are found with the giraffe, i.e., on the palette which has a representation of a hunting scene; in the same scene there also occurs the *motif* of a lion seizing its prey by the nose. In the hunting scene in the Meir tombs there is a representation of the giraffe and also of the lion and its prey. Whether these are simply coincidences or are real connections between the art of Cusæ and the art of the late prehistoric or early dynastic peoples is still uncertain. It is very clear that there were a considerable number of foreigners on the estates of the nomarchs of Cusæ. Besides the Beja herdsmen, to whom Mr. Blackman draws attention emphatically, there is the huntsman, who is attired in the peculiar garment which Mr. Blackman considers to be a "survival of or substitute for the primitive *karnata*"; this huntsman wears on his head an ostrich feather, always the sign of a foreigner, either a Libyan or a negro.

Mr. Blackman has indicated several lines of investigation which would repay further study. Of these, the suggestion that the bull-fight may be part of the cult of the cow-goddess is very interesting. The management and breeding of the sacred cattle is another point, for with the exception of the Apis bull, we know practically nothing of the method of choosing the animal which was to be the representative of the deity.

A small map showing the position of the ancient Cusæ and of the modern Meir as regards some of the other important sites, and a plan of the respective positions of the tombs, would have increased still more the value of a very valuable piece of work.

M. A. MURRAY.



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